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utmore,T.E., Kuijper,J.L.	Vertebrata; Euteleostomi; ; Hominidae; Homo.	linear PAT 15-FEB-2002		109144 Mus mus 115813 Mus mus	178880 NR10 Spl 130441 Rattus n	022265	8857 Homo sap	1865 Novel he 5596 Homo sap	152	5169	8662	5165 Sequence 7358 Sequence	8877	5164 8878	5195	6913	1786 1264	2331	5152 5216	1864	1877	081	8875	620 Homo 874 NR10	178873 NR10 spl	X467333 Sequer	8872 8871	X365149 Sequence	ription	

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Db 1501 TTCCCAAGAGTGAGAGAACATTGGCGTGAAGACACCATCTTTACCAAGCGAGACAAGAGAGA 1500 Oy 1501 TTCCCAAGAGTGAGAGAAGAGAGAGAGAGAGAGAGAGAGA	1261 ACTCAGAGCCCACCACCTTTCCTGGGATCTGTGTCTCAGGCCACGAACTGGACGACCTTTCCTGGGATCTGTGTTCTCAGGCCACGAACTGGACGATCCTGTTCTGTGTTTCTAGGCCACGAACTGGACGATCCTGTGTTCTCAGGCCACGAACTGGACGATCCCTTTCTGTGTTTCTAGGACTATACATCTCTGTGTTCTCAGGCCACACTGTTCCAATGTTGCATGTTGCATGTTGCATGTTGCATGTTGCATGTTGCATGTTGCATGTTGCATGTTGCATGTTGCATGTTTCTAGGATGTTCCATTCTAGAACTTCTTCTGTTGTTATCCAATGTTTCCATCAGAAGTTAAAATTAAAACCTTTCTAGGTTGTATACATCTCTGTGTATCCAATGTTGCAATGTTCCATCAGAAGTTAAAATTAAAACCTTTCTAGGTTATACATCTCTAAAAAGAAGAAGCCATATTCCATCCA	1021 CTACTAACCACCACCACCTGCAACGCCAGCCAGACCTTTTCGCGTTCTATCATTTT	781 CGGTCAAGGAGTCAAAGTTCTGGAGTGACTGGAGCCAAGAAAAATGGGAATGACTGAGG	Db 601 GGATAAAGCCTGAGCTGGGCGCCTGTTCATCTGATTAAAATACACACCTTCGATTCAGGA 660 Qy 661 CAGTCAACAGTACCAGCTGGATGGAAGTCAACTTCGCTAAGAACCCTAAGAACC 720 LIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

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CHUGAI PHARWACEUTICAL CO LTD, MASATSUGU MA
MASAKAZU HASEGAWA
OS HOMO Sapiens (human)
PN WO 02077230-A/3
PD 03-OCT-2002
PF 22-MAR-2002 WO 2002JP002769
PR 26-MAR-2001 JP 01P 087298
                                                                                                                                                                   NR10 splicing varinats.
BD178872
BD178872.1 GI:30016139
WO 02077230-A/3.
Homo sapiens (human)
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Mammalia; Eutheria; Primates; Catarr
1 (bases 1 to 2952)
Maeda,M., Yaguchi,N. and Hasegawa,M.
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L Patent: WO 02077230-A 2 03-OCT-2002;
CHUGAI PHARMACEUTICAL CO LTD, MASATSUGU MAEDA, NORIKO YAGUCHI,
MASAKAZU HASEGAWA
OS Homo sapiens (human)
PN WO 02077230-A/2
PD 03-OCT-2002
PD 03-OCT-2002
PF 22-MAR-2002 WO 2002JP002769
PF 22-MAR-2002 WO 2002JP002769
PF 26-MAR-2001 JP 01P 087298
PI MASATSUGU MAEDA, NORIKO YAGUCHI, MASAKAZU HASEGAWA PC
C12N15/12,CO7K14/715,CO7K16/28,C12N1/15,C12N1/19,C12N1/21, PC
C12N5/10, C07K14/715,G01N33/50,G01N33/53
PC C12P21/02,G01N33/15,G01N33/50,G01N33/53
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Maeda,M., Yaguchi,N. and Hasegawa,M.
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/mol_type="genomic DNA"
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-	618 GCGCCTGTTTCATCTGATTTAAAATACACACTTCGATTCAGGACAGTCAACAGTACCAGC 677	558 GTGAAACCAGTTTTGGGCATCAAACGAATGATTGAATTGAATGGATAAAGCCTGAGTTG 617 	98 CATATGACATACTGGGATTAGAGAACATAGCGAAAACTGAACCACCTAAGATTTTCCGT 5	98 CATATGACATACTGGAGATTAGAGAACATAGCGAAAACTGAACCACCTAAGATTTTCCGT 55	438 ATCCCAGATAATTATACCATTGAGGTGGAAGCTGAAAATGGAGATGGTGTAATTAAATCT 497	378 ACCAATAGTTCTACAAGTGAAAATCGTGCTTCGTGCTCTTTTTTCCTTCC	318 TATACCCAGTACACAGTTAAGAGAACTTACGCTTTTGGAGAAAAACATGATAATTGTACA 377 	258 TGTGTCTACTATAGGAAAAATTTAACCTGCACTTGGAGTCCAGGAAAGGAAACCAGT 317	198 CTCCCCTCACTCTGCAAATTCAGCCTGGCAGCTCTGCCAGCTAAGCCTGAGAACATTTCC 257	3TTAACCTGGGGATGATGTGGACCTGGGCACTGTG	y Match 94.0%; Score 2258.6; DB 6; Length 2480; Local Similarity 99.8%; Pred. No. 0; hes 2261; Conservative 0; Mismatches 4; Indels 0; Gaps 0;	/moi_type="genom /db_xref="taxon: 722 a 558 c 600	Immunex CorporatioN (US) Location/Qualifiers rce 12480 /Organism="Homo sapie	1 Cosman, D.J., Mosley, B.A., Bird, T.A., Dubose, R.F. and Hematopoietin receptors hpr1 and hpr2 Patent: WO 0229060-A 3 11-APR-2002:	MS	ON Sequence 3 from Patent W00229060. N AX467333 AX467333.1 GI:21900584	AX467333	2349 CACACCAAGGAGAAGTCTAAATGCGACCATAGCATGAGACCCTCGGGGCCTCA 2402 	2289 CCATATTTGAAAAATTCAGTGACAGCCAGGGAATTTCTTGTGTCTGAAAAACTTCCAGAG 2348
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1758 GGCCTTCTTATTCTCATTATCCTGACAGTGGCATATGGTCTCAAAAAACCCCAACAAATTG 1817	TICAMGACATIGICATICAGIGICITIGAGATIATICCICATAACTICICIGATIGGIGGA 1/	TACATTOTTCAGGTCATTGCCCAGCACCAGTGCTGGGGGAACCGACGGGACCAGCATAAAT	1578 AAGACAGTCAATTCCAGCATCTTIGCAGTACGGCCTGGAGTCCCTGAAACGAAAAGACCTCT 1637 1638 TACATTGTTCAGGTCATGGCCAGCACCAGTGCTGGGGGAACCAACGGGACCAGCATAAAT 1697	AAGACAGTCAATTTCCAGCATCTTGCAGTACGGCCTGGAGTCCCTGAAACGAAAGACCTCT	1518 AAGGGTATCATCTGCAACTACACCATCTTTTACCAAGCTGAAGGTGGAAAAGGATTCTCC 1577	GAGAACATTGGCGTGAAGACGGTCACGATCACATGGAAAGAGATTCCCAAGAGTGAGAGAG 	TATTCCATCCAGGCTTATGCCAAAGAAGGCGTTCCATCAGAAGGTCCTGAGACCAAGGTG	1338 CCTTTCTGGTGCTATAACATCTCTGTGTATCCAATGTTGCATGACAAAGTTGGCGAGCCA 1397 	CTTTCCTGGGAATCTGTGTCTCAGGCCACGAACTGGACGATCCAGCAAGATAAATTAAAA [1158 GAGGTCATGCAGGCCTGCGTTGCTGAGGACCAGCTAGTGGTGAAGTGGCAAAGCTCTGCT 1217	1098 AAGTCTCCAGTGGCCACCCTGAGGATTCCAGCTATTCAGAGAAAATCATTTCAGTGCATT 1157 	1038 GAACTGCATCTGGGAGGCGAGAGCTTTTGGGTGTCTATGATTTCTTATAATTCTCTTTGGG 1097 	978 TACTATCCAGAAAGCAACACTAACCTCACAGAAACAATGAACACTACTAACCAGCAGCTT 1037 	918 TTATGGAAGAAGGCAAGAGGGAGCCCCAGTCCTAGAGAAAACACTTGGCTACAACATATGG 977 	858 CTGGAACTGTGGAGAGTCCTGAAACCAGCTGAGGCGGATGGAAAGGCCAGTGCGGTTG 917 	798 TYCTGGAGTGACTGGAGCCAAGAAAAATGGGAATGACTGAGGAAGAAGCTCCATGTGGC 857 	738 GGGCTGCAGCCTTTTACAGAATATGTCATAGCTCTGCGATGTGCGGTCAAGGAGTCAAAG 797 	678 TGGATGGAAGTCAACTTCGCTAAGAACCGTAAGGATAAAAACCAAACGTACAACCTCACG 737

	DEST LOCAL SIMILIARITY 99.8%; FIEG. NO. 0; MATChes 2228; Conservative 0; Mismatches 4; Indels 0; Gaps 0; OV 138 CTCTCCCCAGCCTTCATGTGTTAACCTGGGGATGATGATGGGGCACTGTGGGTG 197	tch 92.7%;		Immunex Corporation (US) Location/Qualifiers Locations # Homo sapie	1,T.A., Dubose,R.F. and and hpr2 -2002:	SOURCE Homo sapiens (human) ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	9060.		Qy 2358 GGAGAAGTCTAAATGCGACCATAGCATGAGACCCTCGGGGCCTCA 2402	Qy 2298 AAAAATTCAGTGACAGCCAGGGAATTTCTTGTGTCTGAAAAACTTCCAGAGCACACCAAG 2357	Qy 2238 TCTGGTCAAAGTTTAGTACCAGATCATCTGTGTGAGGAAGGA	Qy 2178 TACCTACGTTCGAGGATGCCAGAGGGGACCCGCCAGAAGACCCAAAGAGCAGCTTCTCTTT 2237	Qy 2118 CTGGGGAAAAGTTTTGAGGAGCTCCCAGTTTCACCTGAGATTCCGCCCAGAAAATCCCAA 2177	Qy 2058 AACAATTTAGGAGGGAAAAGAATGGGTATGTGACCTGCCCCTTCAGGCCTGATTGTCCC 2117	Qy 1998 GTGAACTTTGGGAATGTTCTGCAAGAAATTTTCACAGATGAAGCCAGAACGGGTCAGGAA 2057	QY 1938 GACAGGATCTTAAAACCATGTTCCACCCCCAGTGACAAGTTGGTGATAGACAAGTTGGTG 1997	OY 1878 GGAGATGATTTCAAGGATAAGCTTAAACCTGAAGGAGTCTGATGACTCTGTGAACACAGAA 1937	Qy 1818 ACTCATCTGTGTTGGCCCACCGTTCCCAACCCTGCTGAAAGTAGTATAGCCACATGGCAT 1877	Db 1758 GGCCTTCTTATTCTCATTATCCTGACAGTGGCATATGGTCTCAAAAAACCCAACAAATTG 1817
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TITLE
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Best Local Similarity
Matches 2334; Conserv
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Patent: WO 02077230-A 4 03-OCT-2002;
CHUGAI PHARMACEUTICAL CO LTD,MASATSUGU MAEDA,NORIKO YAGUCHI,
MASAKAZU HASEGAWA

OS Homo sapiens (human)
PD 03-OCT-2002
PP 22-MAR-2002 WO 2002JP002769
PF 22-MAR-2002 WO 2002JP002769
PF 26-MAR-2001 JP 01P 087298
PI MASATSUGU MAEDA,NORIKO YAGUCHI,MASAKAZU HASEGAWA PC
C12N15/12,C07K14/715,C07K16/28,C12N1/15,C12N1/19,C12N1/21, PC
C12N5/10,
CC NRIO splicing varinats
FH Key Location/Qualifiers
FH Key (7)...(1887).
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NR10 splicing varinats.

BD178873

BD178873.1 GI:30016140

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Mammalia; Eutheria; Primates; Cata
1 (bases 1 to 3072)
Maeda,M., Yaguchi,N. and Hasegawa,
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                                             AATTGTACAACCAATAGTTCTACAAGTGAAAATCGTGCTTCGTGCTCTTTTTTTCCCTTCCA 428
                                                                                                                          AACATTTCCTGTGTGTACTACTATAGGAAAATTTAACCTGCACTTGGAGTCCAGGAAAG
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/mol_type="genomic DNA"
/db_xref="taxon:9606"
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95.1%;
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RESULT 7 AF486620 AF486620 2199 bp LOCUS AF486620 AF486620 DEFINITION Homo sapiens gp130-like monocyte ACCESSION AF486620 VERSION AF486620.1 GI:20563276 KEYWORDS	Oy 2349 CACACCAAGGGAGAAGTCTAAATGCGA 1	2289 2341	2229 2281	2169 2221	2109 2161	2101	2041	1929	1892	1861	1801	1741	1749	1621	1561	1501	1500
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Submitted (21-FEB-2002) Molecular Oncology,
South San Francisco, CA 94080, USA
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Sauvage, F.J.
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A novel type I cytokine
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M Homo Sapiens

Eukaryota; Metazoa; Chordata; Craniata
Mammalia; Eutheria; Primates; Catarrhi

1 (bases 1 to 2870)

Maeda, M., Yaguchi, N. and Hasegawa, M.

NRIO splicing varinats
Patent: WO 02077230-A 5 03-OCT-2002;
CHUGAI PHARMACEUTICAL CO LTD, MASATSUGU
MASAKAZU HASEGAWA

OS Homo Sapiens (human)
PN WO 02077230-A/5
PD 03-OCT-2002
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NR10 splicing varinats.
BD178874
BD178874.1 GI:30016141
WO 02077230-A/5.
Homo sapiens (human)
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                                                                                                                             sapiens (human) sapiens
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                                               LTD, MASATSUGU
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                                                                                                      Craniata; V Catarrhini;
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                                               MAEDA, NORIKO
                                                                                                                 Vertebrata;
                                                                                                                                                                                                                                                          2199
                                                                                                                                                                                                                                                                                  2369
                                                                                                       Hominidae;
                                                                                                                                                                                                 linear
                                               YAGUCHI
                                                                                                                 Euteleostomi;
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PR 26-MAR-2001 JP 087298
PI MASATSUGU MAEDA, NORINO YAGUCHI, MASAKAZU HASEGAWA PC C12N15/12, CO7K14/715, CO7K16/28, C12N1/15, C12N1/19, C12N1/21, C12N5/10,
PC C12P21/02, G01N33/15, G01N33/50, G01N33/53
CC NR10 splicing varinats
FH Key Location/Qualifiers
FH CDS (7) (1749)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAAACATTCTCTCTCCCCAGCCTTCATGTGTTAACCTGGGGATGATGTGGACCTGGGCA
            CTGGGAATGTGCATCAGGCAACTCAAGTTTTTCACCACGGCATGTGTCTGTGAATGTCCG
                                                      AACCTCACGGGGCTGCAGCCTTTTACAGAATATGTCATAGCTCTGCGATGTGCGGTCAAG
                                                                                                                                                                                                                                             ATTAAATCTCATATGACATACTGGAGATTAGAGAACATAGCGAAAACTGAACCACCTAAG
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                                                                                                                                                             CCTGAGTTGGCGCCTGTTTCATCTGATTTAAAATACACACTTCGATTCAGGACAGTCAAC
                                                                                                                                                                                                           ATTTTCCGTGTGAAACCAGTTTTGGGCATCAAACGAATGATTCAAATTGAATGGATAAAG
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                                                                                                      AGTACCAGCTGGATGGAAGTCAACTTCGCTAAGAACCGTAAGGATAAAAACCAAACGTAC
                                                                                                                                                   CCTGAGTTGGCGCCTGTTTCATCTGATTTAAAATACACACTTCGATTCAGGACAGTCAAC
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/mol_type="genomic DNA"
/db_xref="taxon:9606"
667 c 709 g 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
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                              ACATGGCATGGAGATGATTTCAAGGATAAGCTAAACCTGAAGGAGTCTGATGACTCTGTG
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                                                                                AACAAATTGACTCATCTGTGTGGCCCACCGTTCCCAACCCTGCTGAAAGTAGTATAGCC
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                     -GATAAGCTAAACCTGAAGGAGTCTGATGACTCTGTG
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RESULT 9
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LOCUS
DEFINITION
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AUTHORS
TITLE
JOURNAL
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VERSION
KEYWORDS
SOURCE
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Query Match
Best Local Similarity
Matches 2240; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                               COUNT
                                                                                                                   source
                                                                                                                                        NRIO SPIICING VARIABLES

L PATEORIE WO 02077230-A 6 03-OCT-2002;
CHUGAI PHARMACEUTICAL CO LTD, MASATSUGU MAEDA, NOR
MASAKAZU HASEGAWA
OS HOMO SAPIENS (human)
PN WO 02077230-A/6
PD 03-OCT-2002
PF 22-MAR-2002 WO 2002JP002769
PF 22-MAR-2001 JP 01P 087298
PI MASATSUGU MAEDA, NORIKO YAGUCHI, MASAKAZU HAS
C12N15/12,C07K14/715,C07K16/28,C12N1/15,C12N1/19
PC C12P5/10, DAEDA, NORIKO YAGUCHI, MASAKAZU HAS
C12N5/10, LOCALION CONTROL CONTROL
PC C12P51/02,G01N33/15,G01N33/50,G01N33/53
CC NRIO SPIICING VARIABLE
FH Key
LOCALION/Qualifiers
FT CDS

FT CDS
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NR10 splicing varinats.

BD178875.1 GI:30016142

WO 02077230-A/6.
                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Cranis
Mammalia; Eutheria; Primates; Catarr
1 (bases 1 to 2858)
Maeda,M., Yaguchi,N. and Hasegawa,M.
                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACACCAAGGGAGAAGTCTAAATGCGACCATAGCATGAGACCCTCGGGGCCTCA
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  Conservative
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                                                                                                          Location/Qualifiers (7) (1653).
Location/Qualifiers
Location/Qualifiers
1. 2858
                                                            /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
667 c 710 g 68
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                      Length
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1/19,C12N1/21,
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Qy	Qy Db	Qу	Qy Db	Qy Db	Qу	Qy Db	Qy Db	Qу	ФУ	Оy	ОУ	Db Qy	Db.	Qy Db	Qy Db	Qy	Qy	dd YQ
49 CAGTGCATTGAGGTCATGCAGGCCTGCGTTGCTGAGGACCAGCTAGTGGTGAAGTGGCAA 1	1089 TCTCTTGGGAAGTCTCCAGTGGCCACCCTGAGGATTCCAGCTATTCAAGAAAAATCATTT 1148 	1029 CAGCAGCTTGAACTGCATCTGGGAGGCGAGAGCTTTTGGGTGTCTATGATTTCTTATAAT 1088 	969 AACATATGGTACTATCCAGAAAGCAACACTAACCTCACAGAAACAATGAACACTACTAAC 1028 	909 GTGCGGTTGTTATGGAAGAAGGCAAGAGGAGCCCCAGTCCTAGAGAAAACACTTGGCTAC 968 	849 CCATGTGGCCTGGAACTGTGGAGAGTCCTGAAACCAGCTGAGGCGGATGGAAGAAGGCCA 908	789 GAGTCAAAGTTCTGGAGTGACTGGAGCCAAGAAAAATGGGAATGACTGAGGAAGAAGCT 848 	729 AACCTCACGGGGCTGCAGCCTTTTACAGAATATGTCATAGCTCTGCGATGTGCGGTCAAG 788	669 AGTACCAGCTGGATGGAAGTCAACTTCGCTAAGAACCGTAAGGATAAAAACCAAACGTAC 728	609 CCTGAGTTGGCGCCTGTTTCATCTGATTTAAAATACACACTTCGATTCAGGACAGTCAAC 668 	549 ATTTTCCGTGTGAAACCAGTTTTGGGCATCAAACGAATGATTCAAATTGAATGGATAAAG 608 	489 ATTAAATCTCATATGACATACTGGAGATTAGAGAAACATAGCGAAAACTGAACCACCTAAG 548 	429 AGAATAACGATCCCAGATAATTATACCATTGAGGTGGAAGCTGAAAATGGAGATGGTGTA 488 	369 AATTGTACAACCAATAGTTCTACAAGTGAAAATCGTGCTTCGTGCTCTTTTTTTCCTTCC	309 GAAACCAGTTATACCCAGTACACAGTTAAGAGAACTTACGCTTTTGGAGAAAAACATGAT 368 	249 AACATTTCCTGTGTCTACTACTATAGGAAAAATTTAACCTGCACTTGGAGTCCAGGAAAG 308 	189 CTGTGGATGCTCCCCTCACTCTGCAAATTCAGCCTGGCAGCTCTGCCAGCTAAGCCTGAG 248 	129 CAAAACATTCTCTCCCCCAGCCTTCATGTGTTAACCTGGGGATGATGTGGACCTGGGCA 188 	69 CTGGGAATGTGCATCAGGCAACTCAAGTTTTTCACCACGGCATGTGTGTG
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2229 CTTCTCTTTTCTGGTCAAAGTTTAGTACCAGATCATCTGTGTGAGGAAGGA	2169 AAATCCCAATACCTACGTTCGAGGATGCCAGAGGGGACCCGCCCAGAAGCCAAAGAGCAG 2228	2109 GATTGTCCCCTGGGGAAAAGTTTTGAGGAGCTCCCAGTTTCACCTGAGATTCCGCCCAGA 2168	GTCAGGAAACAATTTAGGAGGGAAAAGAATGGGTATGTGACCTGCCCTTCAGGCCT 	AGTTGGTGGTGAACTTTGGGAATGTTCTGCAAGAATTTTCACAGATCAAGCCAGAACG	AACACAGAAGACAGATCTTAAAACCATGTTCCACCCCCAGTGACAAGTTGGTGATTGAC	1809 ACATGGCATGGAGTATCAAGGATAAGCTAAACCTGAAGGAGTCTGATGACTCTGTG 1928 	AACAAATTGACTGATGTTGGCCGACGTTCCCAACCCTGCTGAAAGTAGTATAGTCT			1689 AGGATAAAATTGAAGACATTGGTCATTGAGGTGTCTTTGAGGATTAATTGATGATAAAATTTGTCATTGAGTATTGAGTGTCTTTGAGGTATTGAGATTGTTCATTGAGTTGTTGAGTTGAGTAGAGAGTGTCTTTGAGATTAAATTTGTTCATTGAGTTGTTGAGTTGTTGAGTAGAGATTTGAGAAACGAGGGAGC 1620	1509 GGATTCTCCAGGACTGAATTCCAGGATTCTTGCAGTACGGCCTGGAGTCCCTGAAACGA 1628	441	381	.389 'GGCGAGCCATATTCCATCCAGGCTTATGCCAAAGAAGGCTTCCATCAGAAGTCCTGAG		209 CCACCACCCTTTCCTGGGAATCTGTGTCTCAGGCCACGACGACGACGACGAGATCCAGCAAGAT	209 ACCIVITACIO TRANCETISARCACITISCATICATICA PROCESTA CONTROLA CANDA CAN	

	QY 190 TGTGGATGCTCCCCTCACTCTGCAAATTCAGCCTGGCAGCTCTGCCAGCTAAGCCTGAGA 249	Qy 130 AAAACATTCTCTCCCCAGCCTTCATGTGTTAACCTGGGGATGATGTGGACCTGGGCAC 189	Qy 70 TGGGAATGTGCATCAGGCAACTCAAGTTTTTCACCACGGCATGTGTCTGTGAATGTCCGC 129	TGTGTGCAGTATGAAAATTGAGACAGGAAGGCAGAGTGTCAGCTTGTTCCACCTC	Query Match 86.4%; Score 2075; DB 6; Length 2529; Best Local Similarity 100.0%; Pred. No. 0; Matches 2075; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	TWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPSDKLVIDKLVVNFGNVLQEIFTDEA RTGGENNLGGEKNGTRILSSCPTSI" BASE COUNT 764 a 530 c 576 g 659 t ORIGIN	CVAEDQLVVKWQSSALDVNTWWIEWFDVDSEPTTLSWESVSQATWFTQQOKLKPFW CYNLSVYPMLHDKVQEPYSIQAYAKGEVPSEGETKKENIGVKTVTTTWKEIPKSERK GIICNYTIFYQAEGKGFSKTVNSSILQYGLESKKRTSYIVQVMASTSAGGTNGTSI NFKYLSFSVEEIILITSLIGGGLLIIITITYVAYGLKKRTSYIVQVMASTSAGGTNGTSI	GDGVIKSHMTYWRLENIAKTEPPKIFRVKPVLGIKRMIQIEDIKATALEDIKTIK RFRTVNSTSMMEVNEAKNRKDKNQTYNLTGLQPFTEYVIALRCAVKESKFWSDWSQEK MGMTEEEAPCGLELMYKAPKNQTYNLTGLQPFTEYVIALRCAVKESKFWSDWSQEK NLTETMNTTNOOLELHIGGESEFWVMIKTSVNSIGKSEPVATIATPATOEKSFOCIEVNAO	/protein_id="CAD23790.1" /db_xref="G1:18696950.1" /translation="MMTWALUMLPSLCKFSLAALPAKPENISCVYYYRKNLTCTWSP /translation="MMTWALUMLPSLCKFSLAALPAKPENISCVYYYRKNLTCTWSP GKETSYTOYTVKRTYAFGEKHDNCTTNSSTSENRASCSFFLPRITIPDNYTTEVEAEN	/db_xref="taxon:9606" CDS	FEATURES Location/Qualifiers source 1. 2529 /organism="Homo sapiens" /mol type="genomic DNA"	and Maurer,M.F. Cytokine receptor zcytor17 Patent: WO 0200721-A 45 03-JAN-2002; ZymoGenetics, Inc. (US)	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata Mammalia; Eutheria; Primates; Catarrhini; Hominida 1 Sprecher.C.A., Presnell.S.R., Gao.Z., Whitmore T.E.		AX365193 LOCUS AX365193 DEFINITION Sequence 45 from Patent WOO200721. ACCESSION AX365193	2187	Db 2127 CCATATTTGAAAAATTCAGTGACAGCCAGGGAATTTCTTGTGTCTGAAAAACTTCCAGAG 2186 Oy 2349 CACACCAAGGGAGAAGTCTAAATGCGACCATAGCATGAGACCCTCGGAGACCTCA 2402	Db 2067 CTTCTCTTTTCTGGTCAAAGTTTAGTACCAGATCATCTGTGTGAGGAAGGA
Qy 1330 AATTAAAACCTTTCTGGTGCTATAACATCTCTGTGT	QY 1270 CCACCACCCTTTCCTGGGAATCTGTCTCAGGCCACGAACTGGACGATCCAGCAAGATA	1210	1150 1141	QY 1090 CTCTTGGGAAGTCTCCAGTGGCCACCCTGAGGATTCCAGCTATTCAAGAAAAATCATTTC	QY 1030 AGCAGCTTGAACTGCATCTGGGAGGCGAGAGCTTTTGGGTGTCTATGATTTCTTATAATT	QY 970 ACATATGGTACTATCCAGAAAGCACTAACCTCACAGAAACAATGAACACTACCTAC	OY 910 TGCGGTTGTTATGGAAGAAGGCAAGAGGAGCCCCAGTCCTAGAGAAAAACACTTGGCTAC 	QY 850 CATGTGGCCTGGAACTGTGGAGAGCCCTGAAACCAGCTGAGGCGGATGGAAGAAGCCAG	Qy 790 AGTCAAAGTTCTGGAGTGACTGGAGCCAAGAAAAATGGGAATGACTGAGGAAGAAGCTC	OY 730 ACCTCACGGGCTGCAGCCTTTTACAGAATATGTCATAGCTCTGCGATGTGCGGTCAAGG	OY 670 GTACCAGCTGGATGGAAGTCAACTTCGCTAAGAACCGTAAGGATAAAAACCAAACGTACA	Oy. 610 CTGAGTTGGCGCCTGTTTCATCTGATTTAAAATACACACTTCGATTCAGGACAGTCAACA	OY 550 TITTCCGTGTGAAACCAGTTTTGGGCATCAAACGAATGATTGAATGAA	OY 490 TTAAATCTCATATGACATACTGGAGATTAGAGAAAATAGCGAAAACTGAACCACCTAAGA	OY 430 GAATAACGATCCCAGATAATTATACCATTGAGGTGGAAGCTGAAAATGGAGATGGTGTAA	Qy 370 ATTGTACAACCAATAGTTCTACAAGTGAAAATCGTGCTTCGTGCTCTTTTTTCCTTCC	QY 310 AAACCAGTTATACCCAGTACACAGTTAAGAGAACTTACGCTTTTGGAGAAAACATGATA	QY 250 ACATTTCCTGTGTCTACTACTATAGGAAAATTTAACCTGCACTTGGAGTCCAGGAAAGG
TGTATCCAATGTTGCATGACAAAGTTG 1389	NGAACTGGACGATCCAGCAAGATA 1329 	12 12		CCAGCTATTCAAGAAAAATCATTTC 1149 	RGGGTGTCTATGATTTCTTATAATT 1089 	ACAGAAACAATGAACACTACTAACC 1029 	TCCTAGAGAAAACACTTGGCTACA 969 	3CTGAGGCGGATGGAAGAAGGCCAG 909 	ATGGGAATGACTGAGGAAGAAGCTC 849 	ATAGCTCTGCGATGTGCGGTCAAGG 789 	GTAAGGATAAAAACCAAACGTACA 729 	ACACTTCGATTCAGGACAGTCAACA 669 	ATGATTCAAATTGAATGGATAAAGC 609 	NTAGCGAAAACTGAACCACCTAAGA 549 	GAAGCTGAAAATGGAGATGGTGTAA 489 	3CTTCGIGCTCTTTTTTCCTTCCAA 429 	IACGCTTTTGGAGAAAAACATGATA 369 	ACCTGCACTTGGAGTCCAGGAAAGG 309

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REFERENCE
AUTHORS
TITLE
JOURNAL
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BD178870
LOCUS
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1 (bases 1 to 4315)
Maeda, M., Yaguchi, N. and Hasegawa, M.
NRIO splicing varinats
Patent: WO 02077230-A 1 03-OCT-2002;
CHUGAI PHARMACEUTICAL CO LTD, MASATSUGU
MASAKAZU HASEGAWA
OS Homo sapiens (human)
PN WO 02077230-A/1
PD 03-OCT-2002
PF 22-MAR-2002 WO 2002JP002769
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NR10 splicing varinats.

BD178870

BD178870.1 GI:30016137

WO 02077230-A/1.
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Homo sapiens
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
Mammalia; +0 4315)
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PI MASATSUGU MAEDA, NORIKO YAGUCHI, MASAKAZU HASEGAWA PC C12N15/12,C07K14/715,C07K16/28,C12N1/15,C12N1/19,C12N1/21,C12N5/10
PC C12P21/02,G01N33/15,G01N33/50,G01N33/53
PC C12P21/02,G01N33/15,G01N33/50,G01N33/53
PC HSY Location/Oualifiers
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                       GAGTCAAAGTTCTGGAGTGACTGGAGCCAAGAAAAAATGGGAATGACTGAGGAAGAAGCT
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                                                                                    AACCTCACGGGGCTGCAGCCTTTTACAGAATATGTCATAGCTCTGCGATGTGCGGTCAAG
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 CCATGTGGCCTGGAACTGTGGAGAGTCCTGAAACCAGCTGAGGCGGATGGAAGAAGGCCA
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/mol_type="genomic DNA"
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         AACACAGAAGACAGGATCTTAAAAACCATGTTCCACCCCCAGTGACAAGTTGGTGATTGAC
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OS Homo sapiens (human)
PN WO 02077230-A/7
PD 03-OCT-2002
PF 26-MAR-2002 WO 2002JP002769
PR 26-MAR-2001 JP 01P 087298
PR 26-MAR-2002 WO 2002JP002769
PR 26-MAR-2001 JP 01P 087298
PR 26-MAR-2002 WO 2002JP002769
PR 26-MAR-2001 JP 01P 087298
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Maeda, M. Yaguchi, N. and Hasegawa, M.
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                                                     CTGTGGATGCTCCCCTCACTCTGCAAATTCAGCCTGGCAGCTCTGCCAGCTAAGCCTGAG
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/db_xref="taxon:9606"
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RESULT 13 BD091877 BD091877 BD091877 BD091877 BD091877 ACCESSION BD091877 VERSION KEYMORDS KEYMORDS SOURCE ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	Db 1985 CTTCTCTTTTCTGGTCAAAGTTTAGTACCAGATCATCTGTGTGAGGAGGAGCCCAAAT 2044 Qy 2289 CCATATTTGAAAAATTCAGTGACAGCAGGGAATTTCTTGTGTCTGAAAAAACTTCAGAG 2348	Qy 2109 GATTGTCCCCTGGGGAAAAGTTTTGAGGAGCTCCCAATTTCACCTGAGATTCCGCCCAGA 2168	Qy 1989 AAGTTGGTGATGAACTTTGGGAATGTTCTGCAAGAAATTTTCACAGATGAAGCCAGAACG 2048	Db 1649 1648 1649	1621 AGCATANATTCAAGACATTGTCATTATCCTGACAGTGGCATATGGTCTCAAAAAACCC 1749 ATTGGTGGAGGCCTTCTTATTCTCATTATCCTGACAGTGGCATATGGTCTCAAAAAACCC 1649	Db 1381 ACCAAGGTGGAGAACATTGGCGTGAAGACGGTCACGATCACATGGAAAGAGATTCCCAAG 1440 Qy 1509 AGTGAGAGAAAGGGTATCATCTGCAACCTACACCATCTTTTACCAAGCTGAAGGTGAAAA 1568 [

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Best Local 9
Matches 1947
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JOURNAL
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1 (bases 1 to 2119)
UTHORS
Waeda,M. and Yaguchi,N.
Novel hemopoletin receptor protein, NR10
PRICE
PATENT: WO 0075314-A 14 14-DEC-2000;
CHUGAI RESEARCH INSTITUTE FOR MOLECULAR MEDICINE INC, MASATSUGU
MAEDA, NORIKO YAGUCHI
OS Homo sapiens (human)
PN WO 0075314-A/14
PD 14-DEC-2000
PF 01-JUN-2000 WO 2000JP003556
PF 02-JUN-2999 JP 99P 155797,30-JUL-1999 JP 99P 217797 PI
MASATSUGU MAEDA,NORIKO YAGUCHI
PC C12N15/12,C12N5/10,C07K14/715,C07K16/28,C12P21/02,G01N33/53,
PC G01N33/566
CC
FH Key Location/On---1-7-7-
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/organism="Homo sapiens"
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Query Match B1.0%; Score 1945.4; DB 6; Length 2903; Best Local Similarity 99.9%; Pred. No. 0; Matches 1946; Conservative 0; Mismatches 1; Indels 0; Gaps Qy 138 CTCTCTCCCCAGCCTTCATGTGTTAACCTGGGATGATGTGGACCTGGGATG	/PIOCEAIL_1G="CAL23" y1.1" //db_xref="G1:18696956" /translation="MKLSPOPSCVNLGMMWTWALWMLPSLCKFSLAALPAKPENISCV /translation="MKLSPOPSCVNLGMMWTWALWMLPSLCKFSLAALPAKPENISCV /YYKKNITCTWSPGKETSTOYTWKRTYAAGEKHDNCTTNSSTSEKRASCSFFLPRIT IPDNYTIEVEARINGDVIKSHMTYWRELEXIAKTERPRKITPKYPLGIKRMIOIEWIKP ELAPVSSDLKYTLRFRTVNSTSWMEVNFAKNRKDKNQTYNLTGLOPFTEYVIALRCAV KESKFWSDWSQEMMGMTEEDAPCGLELWRVLKPAEDADGRRPVRLLWKKARGAPVLEKT LGYNINYYPESNYNLTEENNTTNOOLELHLGGESEWVSMISYNSLGKSPVATLRIPAI QEKSPQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWFPDVDSEPTTLSWESVSQAT NWTIQODKLKPFWCYNISYYPMLHDKVGSPYSIQAYAKESVPSEGFTKVENIGVKTV TITWKEIFKSERKGIICNYTIFYQAEGGKGFSWYWNSILOYGLBSLKRKTSYVQVM ASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILITUTVAAGLKKPNKLTHLC WPTVPNPAESSSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPSDKLVIDKLVVN FGNVLQEIFTDEARTGQENNLGGEKNGTRILSSCPTSI" 862 a 620 c 664 g 757 t	AL Paten ZymoG S urce	2903 bp DNA linear PAT 15-F WOO200721. rdata; Craniata; Vertebrata; Euteleos mates; Catarrhini; Hominidae; Homo. ,S.R., Gao,Z., Whitmore,T.E., Kuijper	Qy 1878 GGAGATGATTTCAAGGATAAGCTAAACCTGAAGGAGTCTGATGACTGAACACAGAA
0; Db 1523 GAGGICATGCAGGCCTGCTGTGTGCTGAGGTGCCAAAGCTCTGCT 1217 O; Oy 1218 CTAGACGTGAGGCCTGCTTGCTGAGGACCACCTAGTGGTGAAGTTGCAAAGCTCTGCT 1282 197 197 Db 1523 GAGGTCATGCAGGCCTGCGTTGCTGAGGACCACCTAGTGGTGAAGCTCTGCT 1582 198 199 1218 CTAGACGTGAACACTTGGATGAATGGTTTCCGGATGTGAAGCTCAGAGCCCACCACC 1277	Qy 918 TRATGGAAGAGGCAGAGCCCAGTCCTAGAGAAAACACTTGGCTACAACATTAGG	Db 1103 GGCTGCAGCCTTTTACAGAATATGTCATAGCTCTGCGATGTGCGGTCAAGGAGTCCAAG Qy 798 TTCTGGAGTGACTGGAGCCCAAGAAAATGGCAATGACTGAGGAGAGAGCTCCATGTGG Qy 1163 TTCTGGAGTGACTGGAGCCAAGAAAAATGGGAATGACTGAGGAAGAAGACTCCATGTGGC Qy 858 CTGGAACTGGAGCCAAGAAAAAATGGGAATGACTGAGGAAGAAGACCACATGTGGGC Qy 858 CTGGAACTGTGGAGGAGAAAAAATGGGAATGACTGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAA	Oy 558 GTGAAACCAGTTTTGGGCATCAAACGAATGATTCAAATTGAATGGATAAAGCCTGAGTTG Db 923 GTGAAACCAGTTTTGGGCATCAAACGAATGATTCAAATTGAATGGATAAAGCCTGAGTTG Oy 618 GCGCCTGTTTCATCTGATTTAAAATACACACTTCGATTCAGATGGATAAAGCCAGCTACCAGC	Db 623 TGTGTCTACTATAGGAAAATTTAACCTGCACTTGGAGTCCAGGAAAGGAAACCAGT 682 1816 Qy 318 TATACCCAGTACAGATTAAGGAAAACTTACGCTTTTGGAGAAAACATGATAATTGTACA 377 Db 683 TATACCCAGTACACAGTTAAGAGAAACTTACGCTTTTGGAGAAAACATGATAATTGTACA 742 1997 Db 378 ACCAATAGTTCTACAAGTTAAAACTTAAGAGAAACTTACGTGTTTTTCCTTCC

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AUTHORS
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SOURCE
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       Maeda,M. and Yaguchi,N.
Maeda,M. and Yaguchi,N.
Novel hemopoietin receptor protein, NF
Patent: WO 0075314-A 1 14-DEC-2000;
CHUGAI RESEARCH INSTITUTE FOR MOLECUL!
MAEDA, NORIKO YAGUCHI
OS Homo sapiens (human)
PN WO 0075314-A/1
PD 14-DEC-2000
PF 01-JUN-2000 WO 2000JP003556
PR 02-JUN-1999 JP 99P 155797,30-JU
                                                                                                                                      Homo sapiens (human)
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MASATSUGU
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       Homo sapiens (human)
w0 0075314-A/1
14-DEC-2000
01-JUN-2000 w0 2000JP003556
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MAEDA, NORIKO YAGUCHI
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Primates;
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/mol_type="genomic DNA"
/db_xref="taxon:9606"
618 c 662 g 75
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SA SA SE
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CTCTCTCCCCAGCCTTCATGTGTTAACCTGGGGATGATGTGGACCTGGGCACTGTGGATG CTCCCCTCACTCTGCAAATTCAGCCTGGCAGCTCTGCCAGCTAAGCCTGAGAACATTTCC 1; Gaps 257 588 197

TGTGTCTACTACTATAGGAAAAATTTAACCTGCACTTGGAGTCCAGGAAAGGAAACCAGT TATACCCAGTACACAGTTAAGAGAACTTACGCTTTCGGAGAAAAACATGATAATTGTACA TATACCCAGTACACAGTTAAGAGAACTTACGCTTTTGGAGAAAAACATGATAATTGTACA TGTGTCTACTACTATAGGAAAAATTTAACCTGCACTTGGAGTCCAGGAAAGGAAACCAGT CTCCCCTCACTCTGCAAATTCAGCCTGGCAGCTCTGCCAGCTAAGCCTGAGAACATTTCC 437 768 377 708 317 648

GTGAAACCAGTTTTGGGCATCAAACGAATGATTCAAATTGAATGGATAAAGCCTGAGTTG CATATGACATACTGGAGATTAGAGAACATAGCGAAAACTGAACCACCTAAGATTTTCCGT CATATGACATACTGGAGATTAGAGAACATAGCGAAAACTGAACCACCTAAGATTTTCCGT

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GCGCCTGTTTCATCTGATTTAAAATACACACTTCGATTCAGGACAGTCAACAGTACCAGC GCGCCTGTTTCATCTGATTTAAAATACACACTTCGATTCAGGACAGTCAACAGTACCAGC

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TGGATGGAAGTCAACTTCGCTAAGAACCGTAAGGATAAAAACCAAACGTACAACCTCACG TGGATGGAAGTCAACTTCGCTAAGAACCGTAAGGATAAAAACCAAACGTACAACCTCACG 1128 737

GGGCTGCAGCCTTTTACAGAATATGTCATAGCTCTGCGATGTGCGGTCAAGGAGTCAAAG GGGCTGCAGCCTTTTACAGAATATGTCATAGCTCTGCGATGTGCGGTCAAGGAGTCAAAG 1188 797

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CTGGAACTGTGGAGAGTCCTGAAACCAGCTGAGGCGGATGGAAGAAGGCCCAGTGCGGTTG 977 917

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		57 AAACAATTTAGGAGGG	20
	2056 2448	998 GTGAACTTTGGGAATGTTCTGCAAGAAATTTTCACAGATGAAGCCAGAACGGGTCAGG-A	19 23
•	1997	938 GACAGGATCTTAAAACCATGTTCCACCCCCAGTGACAAGTTGGTGATTGACAAGTTGGTG	19
	2388		23
	1937	878 GGAGATGATTTCAAGGATAAGCTAAACCTGAAGGAGTCTGATGACTCTGTGAACACAGAA	18
	2328		22
	1877 2268	818 ACTCATCTGTGTGGCCCACCGTTCCCAACCCTGCTGAAAGTAGTATAGCCACATGGCAT	18 22
	1817 2208	758 GGCCTTCTTATTCTCATTATCCTGACAGTGGCATATGGTCTCAAAAAACCCCAACAAATTG	17 21
	1757	698 TICAAGACATIGICATICAGIGICITIGAGATIAFCCICATAACIICICGATIGGIGGA	16
	2148		20
	1697	638 TACATTGTTCAGGTCATGGCCAGGACCAGTGCTGGGGGAACCAACGGGACCAGCATAAAT	16
	2088		20
	1637	578 AAGACAGTCAATTCCAGCATCTTGCAGTACGGCCTGGAGTCCCTGAAACGAAAGACCTCT	15
	2028		19
	1577 1968	518 AAGGGTATCATCTGCAACTACACCATCTTTTACCAAGCTGAAGGTGGAAAAGGATTCTCC	15 19
	1517	458 GAGAACATTGGCGTGAAGACGGTCACGATCACATGGAAAGAGATTCCCCAAGAGTGAGAGA	14
	1908		18
	1457	398 TATTCCATCCAGGCTTATGCCAAAGAAGGCGTTCCATCAGAAGGTCCTGAGACCAAGGTG	13
	1848		17
	1397	338 CCTTTCTGGTGCTATAACATCTCTGTGTATCCAATGTTGCATGACAAAGTTGGCGAGCCA	13
	1788		17
	1337 1728	278 CTTTCCTGGGAATCTGTGTCTCAGGCCACGAACTGGACGATCCAGCAAGATAAATTAAAA	12 16
	1277 1668	218 CTAGACGTGAACACTTGGATGATTGAATGGTTTCCGGATGTGGACTCAGAGCCCACCACC	12 16
	1217	158 GAGGTCATGCAGGCCTGCGTTGCTGAGGACCAGCTAGTGGTGAAGTGGCAAAGCTCTGCT	11
	1608		15
	1157 1548	D98 AAGTCTCCAGTGGCCACCCTGAGGATTCCAGCTATTCAAGAAAAATCATTTCAGTGCATT	10 14
	1097	D38 GAACTGCATCTGGGAGGCGAGAGCTTTTGGGTGTCTATGATTTCTTATAATTCTCTTGGG	10
	1488		14
	1037 1428	978 TACTATCCAGAAAGCAACACTAACCTCACAGAAACAATGAACACTACTAACCAGCAGCTT 	13

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Db 2449 AAACAATTTAGGAGGGAAAAGAATGGG 2476

Search completed: August 5, 2003, 02:25:32 Job time: 8734 secs

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n NR10.3 splic n NR10.8 splic n haemopojetin

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Result
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2334
2334
2258.6
2204
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2136
2075
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1: /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA1981.DAT:*

2: /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA1981.DAT:*

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2480
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                           ABA93767
ABQ83365
ABQ83364
AAD38772
ABQ83366
ABQ83366
ABQ83367
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10308.506 Million cell updates/sec
                                                                                                                                                                                                                       Description
                                                  Human
Human
                                                                                                                         Human
Human
                                                                                                                                                                         Human
n zcytor17 cDN
n NR10.4 splic
n NR10.4 splic
n haematopoiet
n NR10.5 splic
n NR10.5 splic
n NR10.7 splic
n NR10.7 splic
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RESULT 1

ALIGNMENTS

O

AAC92338 AAS69258 ABQ83372 ABQ83373

Mouse haematopoiet
Mouse zcytor17 pol
Human zcytor17 pol
Mouse zcytor17 pol
DNA encoding novel
Human haemopoietin
DNA encoding novel
Human NR10 splicin
Human NR10 4 exon
DNA encoding novel
Human NR10 4 exon
DNA encoding novel
JR10 Mus muscul
Mouse ppl30 noting
gpl30 N-terminal f
Human spl30 native

AAS69257 ABA93773

ABA93843

2440 587 937 2895 1151 2995 2995 2369 2369 2754 3085 3085 3085

> Human interleukin-Human gp130 DNA Breast cancer-asso Nucleotide sequenc

Breast cancer asso Insert DNA of pGP1 1947 1948. 4 1932. 2 11592. 2 11568. 4 11568. 4 11568. 4 11568. 4 1157. 4 1157. 4 11157. 6 11139. 6 11

ABA93821 ABL95746 ABL88257 ABK33581

Human zcytor17 cDN
Human haemopoletin
Human zcytor17 pro
Human zcytor17-Fc4
Human angiogenesis
Human pRO21384 cDN
cDNA encoding huma
Human zcytor17 pro
Human zcytor17 pro
Human zcytor17 3'R
Mouse mNR10s7BL-6
Mouse mNR10s1bl-c
Zcytor17 soluble if

ABA93809 ABA93804 ABA93780 ABQ83371 ABQ83370 ABA93781 AAD38776 ABA93810 ABA93784

ABA93767 ID ABA93767 standard; cDNA; 2386 BP. XX AC ABA93767; XX DT 01-MAY-2002 (first entry) XX DE Human zcytor17 cDNA sequence SEQ ID NO:1. XX Zcytor17; chromosome 5; 5q11; cytokine receptor; immunomodulatory; cytostatic; antinflammatory; antinflammatory; spleenic; blood; bone; XX M																		
dulatory; cytostatic; bone; cohn's disease; sis; cancer; sease; ss.	08-1EB-2001;				XX	XX	XX	_	_	_	_			01-MAY-2002	XX		ID ABA93767 standard; cDNA; 2386 BP.	ABA93767

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CC Zcytor17 has immunomodulatory, antiinflammatory, antiviral, cytostatic, cc antirheumatic, antiarthritic and muscular activities. The zcytor17 CC proteins are useful for treating and diagnosing lymphoid, immune, cc inflammatory, spleenic, blood or bone disorders. Agonists or cc anti-zcytor17 antibodies are useful in stimulating cell-mediated cc immunity and for stimulating lymphocyte proliferation, such as in the creatment of infections involving immunosuppression, including certain cc viral infections. They are also useful for inducting cytotoxicity and cc for treating leukopenias. Antagonist of zcytor17 polypeptides are useful for treating autoimmune diseases (e.g. rheumatoid arthritis and multiple sclerosis), inflammatory bowel disease. Zcytor17 was mapped to cc chromosome 5, specifically to the 5q11 chromosomal region. ABA93767 to ABA93843 and ABB05730 to ABB05745 represent sequences used in the cxx
                                                                                                                                                                                                                                                                                                                                  В
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                                    ATGGTGTAATTAAATCTCATATGACATACTGGAGATTAGAGAACATAGCGAAAACTGAAC
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             CACCTAAGATTTTCCGTGTGAAACCAGTTTTGGGCATCAAACGAATGATTCAAATTGAAT
                                                                                                                                                                                  AACATGATAATTGTACAACCAATAGTTCTACAAGTGAAAATCGTGCTTCGTGCTCTTTT
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/product= "Human HPR1 protein"
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/note= "This region is specifically
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metastasis, osteoporosis resulting from an excess of bone-resorbing cells. HPR sequences are also useful for treating medical conditions and diseases such as cell proliferation, metabolic and reproductive hormone related conditions. They are useful for treating various haematologic and oncologic disorders e.g., Epstein-Barr virus-positive nasopharyngeal carcinoma, myelogenous leukaemia, colon, stomach, prostate, renal cell, cervical and ovarian cancers, lung cancer (SCLC and NSCLC), including cancer-associated cachexia, fatigue, solid tumours (e.g., osteosarcoma, sarcoma), carcinoma (e.g., adenocarcinoma (for example, breast cancer), squamous cell carcinoma), haematologic disorders, anaemias (e.g., anaemia of chronic disease, aplastic anaemia, Fanconi's aplastic anaemia
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13-OCT-2000;
20-FEB-2001;
        of chronic disease, aplastic anaemia, Fanconi's aplastic anaemia), myelo dysplastic syndromes (including refractory anaemia, refractory anaemia with ringed sideroblasts or with excess blasts), idiopathic thrombocytopaenic purpura (ITP), sickle cell vasocclusive crisis, myelofibrosis/ myeloid metaplasia, osteoclast disorders that lead to bone loss such as osteoporosis including post-menopausal osteoporosis, periodontitis resulting in tooth loosening or loss, prosthesis loosening after joint replacement, neurodegenerative conditions (e.g., acute polyneuropathy, Bell's palsy, anorexia nervosa, chronic fatique syndrome, transmissible dementia including Creutzfeld-Jacob disease, Gdmyelinating neuropathy, Guillain-Barre syndrome, vertebral disc disease, Guiff war syndrome, Guillain-Barre syndrome, vertebral disc disease, Guiff war syndrome,
                                                                                                                                                                                                                                                                                                                                          The present invention relates to human and murine haematopoietin receptor polypeptides HPR1 and HPR2. Sequences of the invention are useful for treating cell proliferation conditions e.g., pancytopaenia, leukopaenia, anaemia, thrombocytopaenia, neurodegenerative disorders and osteoporosis resulting from a lack of bone-forming cells. They are also useful for treating cell proliferation conditions such as leukaemia and tumour
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498 CATATGACATACTGGAGATTAGAGAAAACTGAAACCTAAGATTTTCCGT 1111111111111111111111111111111	cerebral ischaemic diseases. HPR1 and HPR2 polypeptides are also useful cfor treating various other disorders such as osteoporosis, obesity. C deficient mammary development and infertility. The present sequence is human HPR1 cDNA. X Sequence 2480 BP; 722 A; 558 C; 600 G; 600 T; 0 other; Query Match Best Local Similarity 99.8%; Pred. No. 0; Matches 2251; Conservative 9, Mismatches 4; Indels 0; Gaps 0; HILLIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
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                                                                                                                         The present invention describes haematopoietic receptor NR10 splicing variants (I). (I) have immunomodulator and haemostatic activities. The proteins and encoded genes are applicable in searching for novel haematopoietic factors, and developing remedies for immunological and haematopoietic diseases. The haematopoietin receptor genes participate in in vivo immunomodulation and haematopoietic cell regulation, and in the search for haematopoietic factors capable of functionally binding to the receptors. The present sequence encodes the human NR10.5 protein
                                                                                                                                                                                                                                                                                                                                                                                                      NR10 splicing variants of hematopoietin receptor proteins and encoded genes, applicable in searching hematopoietic factors and developing remedies for immunological and hematopoietic diseases
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                The present invention describes haematopoietic receptor NR10 splicing variants (1). (1) have immunomodulator and haemostatic activities. The proteins and encoded genes are applicable in searching for novel haematopoietic factors, and developing remedies for immunological and haematopoietic diseases. The haematopoietic receptor genes participate in in vivo immunomodulation and haematopoietic cell regulation, and in the search for haematopoietic factors capable of functionally binding to the receptors. The present sequence encodes the human NR10.6 protein
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1029 CAGCAGCTTGAACTGCATCTGGGAGGCGAGAGCTTTTGGGTGTCTATGATTTCTTATAAT 1088	969 AACATATGGTACTATCCAGAAAGCAACAACTAACCTCACAGAAACAATGAACACTAACTA	909 GTGCGGTTGTTATGGAAGAAGGCAAGAGGAGCCCCAGTCCTAGAGAAAACACTTGGCTAC 968 	849 CCATGTGGCCTGGAACTGTGGAGAGTCCTGAAACCAGCTGAGGCGGATGGAAGAAGGAAG	789 GAGTCAAAGTTCTGGAGTGACTGGAGCCAAGAAAAAATGGGAATGACTGAGGAAGAAGCT 848 	729 AACCTCACGGGGCTGCAGCCTTTTACAGAATATGTCATAGCTCTGCGATGTGCGGTCAAG 788	669 AGTACCAGCTGGATGGAAGTCAACTTCGCTAAGAACCGTAAGGATAAAAACCAAACGTAC 728	609 CCTGAGTTGGCGCCCTGTTTCATCTGATTTAAAATACACACTTCGATTCAGGACAGTCAAC 668	549 ATTTTCCGTGTGAAACCAGTTTTGGGCATCAAACGAATGAAT	489 ATTAAATCTCATATGACATACTGGAGATTAGAGAACATAGCGAAAACTGAACCACCTAAG 548 	429 AGAATAACGATCCCAGATAATTATACCATTGAGGTGGAAGCTGAAAATGGAGATGGTGTA 488	369 AATTGTACAACCAATAGTTCTACAAGTGAAAATCGTGCTTCGTGCTCTTTTTTCCTTCC	309 GAAACCAGTTATACCCAGTACACACTTAAGAGAACTTACGCTTTTGGAGAAAAACATGAT 368	249 AACATTTCCTGTGTCTACTACTATAGGAAAAATTTAACCTGCACTTGGAGTCCAGGAAAG 308	189 CTGTGGATGCTCCCCTCACTCTGCAAATTCAGCCTGGCAGCTCTGCCAGCTAAGCCTGAG 248	129 CAAAACATTCTCTCCCCCAGCCTTCATGTGTTAACCTGGGGATGATGTGGACCTGGGCA 188	69 CTGGGAATGTGCATCAGGCAACTCAAGTTTTTCACCACGGCATGTGTCTGTGAATGTCCG 128	Query Match 89.9%; Score 2160; DB 25; Length 2870; Best Local Similarity 96.5%; Pred. No. 0; Matches 2252; Conservative 0; Mismatches 0; Indels 82; Gaps 1;	Sequence 2870 BP; 799 A; 667 C; 709 G; 695 T; 0 other;
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2109 GATTGTCCCCTGGGGAAAAGTTTTGAGGAGCTCCCAGTTTCACCTGAGATTCCGCCCAGA 2168 	9 GETCAGGAAAACAATTTAGGAGGGGAAAAGAATGGGTATGTGACCTGCCCCTTCAGGCCT 21 GTCAGGAAAACAATTTAGGAGGGGAAAAGAATGGGTATGTGACCTGCCCCTTCAGGCCT 19	### AGTTGGTGGTGAACTTTGGGAATGTTCTGCAAGAATTTTCACAGATGAAGCCAGAACG	929 AACACAGANACAGGATCTTAAAACCATGTTCCACCCCAGTGACAAGTTGGTGATTGAC 779 AACACAGAAGACAGGATCTTAAAACCATGTTCCACCCCCAGTGACAAGTTGGTGATTGAC	by ACATGGCATGGAGATGATTTCAAGGATAAGCTAAACCTGAAGAGTCTGATGACTCTGTG	809 AACAAATIBACICAICIBIBITBBCCCACCBIICCCAACCCIBCIBAAABIABAABIAIABCC 1	749 ATTIGGTGGAGGCCTTCTTATTCTCATTAICCTIGACAGTGCATAIGGTCTCAAAAAACCC 1	9 AGCATAAATTTCAAGACATGTCATCAGTGTCTTTGAGATTATCCTCATAACTTCTCTG 1		569 GATTCTCCAAGACAGTCAATTCCAGCATCTTGCAGTACGCCTGGAGTCCCTGAAACGA 1	509 AGTGAGAGAAAGGTATCATCTGCAACTACACCATCTTTTACCAAGCTGAAGGTGGAAAA 1 	449 ACCAAGGTGGAGAACATTGGCGTGAAGACGGTCACGATGACATGGAAGAGATTCCCAAG 15	389 GGCGAGCCATATTCCATCCAGGCTTATGCCAAAGAAGGCTTCCATCAGAAGTCCTGAG	329 AANTTAAAACCTTTCTGGTGCTATAACATCTCTGTGTATCCAATGTTGCATGACAAGGTT	69	9 AGCICTGCICTAGACGTGAACACTTGGAIGATTGAATGGTTTCCGGAIGTGGACTCAGAG 	CAGIGCATIGAGGICATGCAGGCCTGCGTTGCTGAGGACCAGCTAGTGGTGAAGTGGCAA 12		1 CAGCAGCTTGAACTGCATCTGGGAGGCGAGAGCTTTTGGGTGTCTATGATTTCTTATAAT

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                                                                                     The present invention describes haematopoietic receptor NR10 splicing variants (1). (1) have immunomodulator and haemostatic activities. The proteins and encoded genes are applicable in searching for novel haematopoietic factors, and developing remedies for immunological and haematopoietic diseases. The haematopoietin receptor genes participate in in vivo immunomodulation and haematopoietic cell regulation, and in the search for haematopoietic factors capable of functionally binding to the receptors. The present sequence encodes the human NR10.7 proteir
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CC The present invention describes a cytokine receptor designated zcytor17. CC Zcytor17 has immunomodulatory, antiinflammatory, antiviral, cytostatic, CC antirheumatic, antiarthritic and muscular activities. The zcytor17 CC proteins are useful for treating and diagnosing lymphoid, immune, CC anti-zcytor17 antibodies are useful in stimulating cell-mediated CC immunity and for stimulating lymphocyte proliferation, such as in the CC viral infections involving immunosuppression, including certain CC viral infections. They are also useful for inducting cytotoxicity and CC of treating leukopenias. Antagonist of zcytor17 polypeptides are useful CC sclerosis), inflammatory diseases (e.g. Crohn's disease), cancer, CC pancreatitis, and inflammatory bowel disease. Zcytor17 was mapped to CC chromosome 5, specifically to the 5q11 chromosomal region. ABA93767 to ABA93843 and ABB05730 to ABB05745 represent sequences used in the
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29-JUN-2000;
08-FEB-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Isolated polynucleotide encoding a cytokine useful for treating and diagnosing lymphoid spleenic, blood or bone disorders -
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QY 970 ACATATGGTACTATCCAGAAAGCAACATAACCTCACAGAAACAATGAACACTACCTAACC 1029	QY 910 TGCGGTTGTTATGGAAGAAGGCAAGAGGAGCCCCAGTCCTAGAGAAAACACTTGGCTACA 969	QY 850 CATGTGGCCTGGAACTGTGGAGAGTCCTGAAACCAGCTGAGGCGGATGGAAGAAGGCCAG 909	Qy 790 AGTCAAAGTTCTGGAGTGACTGGAGCCAAGAAAAATGGGAATGACTGAGGAAGAAGCTC 849	Qy 730 ACCTCACGGGGCTGCAGCCTTTTACAGAATATGTCATAGCTCTGCGATGTGCGGTCAAGG 789	QY 670 GTACCAGCTGGATGGAAGTCAACTTCGCTAAGGAACCGTAAGGATAAAAACCAAACGTACA 729	QY 610 CTGAGTTGGCGCCTGTTTCATCTGATTTAAAATACACACTTCGATTCAGGACAGTCAACA 669	QY 550 TITTCCGTGTGAAACCAGTTTTGGGCATCAAACGAATGATTCAAATTGAATGGATAAAGC 609	QY 490 TTAAATCTCATATGACATACTGGAGATTAGAGAACATAGCGAAAACTGAACCACCTAAGA 549	Qy 430 GAATAACGATCCCAGATAATTATACCATTGAGGTGGAAGCTGAAAATGGAGATGGTGTAA 489	Qy 370 ATTGTACAACCAATAGTTCTACAAGTGAAAATCGTGCTTCGTGCTCTTTTTTCCTTCC	QY 310 AAACCAGTTATACCCAGTACACAGTTAAGAGAACTTACGCTTTTGGAGAAAAACATGATA 369	QY 250 ACATTTCCTGTGTCTACTATAGGAAAATTTAACCTGCACTTGGAGTCCAGGAAAGG 309	QY 190 TGTGGATGCTCCCCTCACTCTGCAAATTCAGCCTGGCAGCTCTGCCAGCTAAGCCTGAAGA 249	QY 130 AAAACATTCTCTCCCCCAGCCTTCATGTGTTAACCTGGGGATGATGTGGGCACCTGGGCAC 189	OY 70 TGGGAATGTGCATCAGGCAACTCAAGTTTTTCACCACGCCATGTGTCTGTGAATGTCCGC 129	QY 10 TGTGTGTGCAGTATGAAAATTGAGACAGGAAGGCAGAGTGTCAGCTTGTTCCACCTCAGC 69	Query Match 86.4%; Score 2075; DB 24; Length 2529; Best Local Similarity 100.0%; Pred. No. 0; Matches 2075; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	XX SQ Sequence 2529 BP; 764 A; 530 C; 576 G; 659 T; 0 other;
dd , Yy	dd Vy	g dg	Db 42	da An	g da	g da	Ov B &	₽ B !	OV DB &	סט ט	D D 1	0v Db	. מש גא	אַם אַם גאַ	Db dg	Db dy) D	Db
2050 GTCAGGAAAACAATTTAGGAGGGAAAAGAATGGG 2084 	990 ASTIGGIGAACITIGGGAAIGTICIGCAAGAA 	O ACACAGAAGACAGATETTAAAACCATGTTCCACCCCCAGTGACAAGTTGGTGATTGACA		TELU ACAAATTGACTCATCTGTGTTGGCCCACCGTTCCCAACCCTGCTGAAAGTAGTATAGCCA 1869 	TOU TOWNS OF COLOR THAT ICC TOWN AND TOWN AND THE COLOR	681 GCATAAATTTCAAGACATTGTCATTCAGTGTCTTTGAGATTATCCTCATAACTTCTCTGA	690 GCATAAATTTCAAGACATTGTCATTCAGGTCATTGAGAGATTATCCTCAGAACTTATAACTTCTCTGA	561 GATTCTCCAAGACTCAATTCCAGCATCATGCAGTACGGGCGGG	570 GATTOTOCAAGACAGTCAATTCAGCATCTTTTAGCAAGCTGGAAGGTGGAAAGCGAA	CCAAGGAGAAAGAGCTTATTGGCGAACTTACACACATCACATGAAAGAGAAAAGGCTTGAAAGATTCCCCAAGA	THE STATE OF THE S	90	270 CANCHACKA II IKAI ISOSAAIKI TIISII KII KASALAA KAANIA	GCLAGACGCTTTAGACGCAAGACACTTGGATGATTGGATGGTTTCCGGATGTTGGACTTCAGAGC	130 ASTROCATION OF CATALOGUE CONTROL TO CONTROL TO CONTROL TO CONTROL TO CATALOGUE CANA 141 ASTROCATION CONTROL CONTROL CONTROL TO CATALOGUE CANA 141 ASTROCATION CONTROL CONT	V CTCTTSUGAAGTCTCCAGTUGCCACCCTGAGGATTCCAGCTATTCAAGAAAAATCATTTC 1		961 ACATATGGTACTATCCAGAAAGCAACACTAACCTCACAGAAACAATGAACACTACTAACC 1020

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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes haematopoietic receptor NR10 splicing variants (I). (I) have immunomodulator and haemostatic activities. The proteins and encoded genes are applicable in searching for novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NR10 splicing variants of hematopoietin receptor proteins genes, applicable in searching hematopoietic factors and cremedies for immunological and hematopoietic diseases
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                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                     haematopoietic factors, and developing remedies for immunological and haematopoietic diseases. The haematopoietin receptor genes participate in in vivo immunomodulation and haematopoietic cell regulation, and in the search for haematopoietic factors capable of functionally binding to the receptors. The present sequence encodes the human NR10.3 protein from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 2; Fig 1-2; 250pp; Japanese.
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   AACATTTCCTGTGTCTACTACTATAGGAAAAATTTAACCTGCACTTGGAGTCCAGGAAAG
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The present invention describes a cytokine receptor designated zcytor17. Zcytor17 has immunomodulatory, antiinflammatory, antivities. The zcytor17 antirheumatic, antiarthritic and muscular activities. The zcytor17 proteins are useful for treating and diagnosing lymphoid, immune, inflammatory, spleenic, blood or bone disorders. Agonists or anti-zcytor17 antibodies are useful in stimulating cell-mediated immunity and for stimulating lymphocyte proliferation, such as in the treatment of infections involving immunosuppression, including certain viral infections. They are also useful for inducting cytotoxicity and for treating leukopenias. Antagonist of zcytor17 polypeptides are useful for treating autoimmune diseases (e.g. crohm's disease), cancer, pancreatitis, and inflammatory bowel disease. Zcytor17 was mapped to chromosome 5, specifically to the 5q11 chromosomal region. ABA93767 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-JUN-2000;
29-JUN-2000;
08-FEB-2001;
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Query Match
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Matches 1945
                                                                                                                                                            The present sequence encodes a human haemopoietin receptor protein (NR10), specifically designated NR10.1. NR10 occurs as a transmembrane protein and a soluble protein. NR10 is a haemopoietin receptor molecule which participates in immunoregulation and haematopoietic cell regulation in vivo, and is useful in searching for haematopoietic factors capable of binding to the receptor. NR10 can be used for the identification of substances for the treatment and prevention of immune and haematopoietic disorders including autoimmune diseases and allergies such as metal and pollen allergy.
                                                                                                                                                                                                                                                                                                                                              Claim 1; Fig 3-5; 127pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                    treatment of immune and diseases and allergies -
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30-JUL-1999;
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DB; AAB51242.
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08-FEB-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes a cytokine receptor designated zcy zcytor17 has immunomodulatory, antiinflammatory, antiviral, cytost antirheumatic, antiarthritic and muscular activities. The zcytor17
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Search completed: August 4, 2003, 22:35:48 Job time: 636 secs

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OM nucleic - nucleic search, using sw model GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

August 4, 2003, 18:18:26; Search time 141 Seconds (without alignments) 7519.165 Million cell updates/sec

Title: Perfect score:

Run on:

Sequence: US-09-892-949-1
2402
1 ggcacgaggtgtgtgtgcag.....atgagaccctcggggcctca 2402

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Issued_Patents_NA:*
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2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/Bockfiles1.seq:*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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ALIGNMENTS

FARMER TYPE: N-terminal FARGENT TYPE: N-terminal ORIGINAL SOURCE: INSUE TYPE: human plac IMMEDIATE SOURCE: CLONE: B10G/pDC303 FEATURE: NAME/KEY: CDS LOCATION: 2442369 FEATURE:	SAF INFORM	CITY: Seattle STATE: WA COUNTRY: USA 21P: 98101 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compati COMPUTER: IBM PC compati OPERATING SYSTEM: PC-DOS SOFTWARE: Patentin Relace CURRENT APPLICATION DATA: APPLICATION NUMBER: US/O FILING DATE: 19911122 CLASSIFICATION: 435	RESULT 1 US-07-797-556-1 US-07-797-556-1 Sequence 1, Application US/07797556 Sequence 1, Application US/07797556 Patent NO. 5262522 GENERAL INFORMATION: APPLICANT: Gearing, David P. TITLE OF INVENTION: Receptor for TITLE OF INVENTION: Inhibitory NUMBER OF SEQUENCES: 17 CORRESPONDENCE ADDRESS: ADDRESSEE: Immunex Corporation of STREET: 51 University Street
placenta	MATION: ryn A. R: 32,172 UMBER: 2607 FORMATION: 7-0430 0606 NO: 1: TICS: pairs pairs gle to mrna	Etle SA ABBLE FORM: RABLE FORM: IS FLOPPY disk ISM PC compatible YSTEM: PC-DOS/MS-DOS PATENTIA Release #1.0, Version #1.25 CATION DATA: INUMBER: US/07/797,556 19911122 TON: 435	US/07797556 David P. Receptor for Oncostatin M and Leukemia Inhibitory Factor 17 Corporation Corporation ity Street

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Pred. No. 7
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CCCTGAAACGAAAGACCTCTTACATTGTTCAGGTCATGGCCAGCACCAGTGCTGGGGGAA
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Pred. No. 7.4e-20;
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US-09-058-263-1
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                                                                                                                                                                                                                                     TELEX: 756822
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                  NAME: Seese, Kathryn A.
REGISTRATION NUMBER: 32,172
REFERENCE/DOCKET NUMBER: 2614
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 587-0430
TELEFAX: (206) 233-0644
                                            ORIGINAL SOURCE:
TISSUE TYPE: h
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 01 FILING DATE: 26-MAY-1994 ATTORNEY/AGENT INFORMATION: NAME: Seese, Kathryn A.
                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/0
FILING DATE: 12-SEP-1994
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SOFTWARE: Microsoft Wo
CURRENT APPLICATION DATA:
FEATURE:
NAME/KEY:
                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
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                                                                                             FRAGMENT TYPE:
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HYPOTHETICAL:
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STATE: WA
                                CLONE:
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TOPOLOGY: lin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER:
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                   AAGGTGGAAAAGGATTCTCCAAGACAGTCAAGTCCAGCATCTTGCAGTACGGCCTGGAGT
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TCATTGGAAATGAAACTGCTGTGAATGTGGATTCTTCCCACACAGAATATACATTGTCCT
                                                                                    AGATTCCCAAGAGTGAGAGAAAGGGTATCATCTGCAACTACACCATCTTTTACCAAGCTG
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                                                                  AACTTCCTGTTGATGTTCAGAATGGATTTATCAGAAATTATACTATATTTATAGAACCA
                                                                                                                                     AAGGACCTACTGTTCGGACAAAAAAAGTAGGGAAAAACGAAGCTGTCTTAGAGTGGGACC
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US-09-059-099-1
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                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Apple 7.1
SOFTWARE: Microsoft Word, V
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                           REGISTRATION NUMBER: 32,172
REFERENCE/DOCKET NUMBER: 26
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 587-0430
TELEPAX: (206) 233-0644
IMMEDIATE SOURCE:
CLONE: B10G/pDC303
                                ORIGINAL SOURCE:
TISSUE TYPE:
                                                                                 ANTI-SENSE: NO
                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                        FILING DATE: 26-MAY-1994
ATTORNEY/AGENT INFORMATION:
NAME: Seese, Kathryn A.
                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy
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                                                                 FRAGMENT TYPE:
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TITLE OF INVENTION: Receptor
                                                                                                                                                                          LENGTH:
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                                                                                                                                              TYPE: nucleic STRANDEDNESS:
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TELEX: 75682
                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
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Sequence 1, Application Patent No. 6010886 GENERAL INFORMATION:
APPLICANT: Mosley
APPLICANT: Cosman INFORMATION FOR SEQ ID NO: 1: APPLICATION NUMBER: US/08/ FILING DATE: 12-SEP-1994 APPLICATION UMBER: US 08/ FILING DATE: 26-MAY-1994 ATTORNEY/AGENT INFORMATION: NAME: Seese, Kathryn A. REGISTRATION NUMBER: 32.17 REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION
TELEPHONE: (206) 587-0430 COMPUTER: Apple Macintosh
OPERATING SYSTEM: Apple 7.1
SOFTWARE: Microsoft Word, Version
CURRENT APPLICATION DATA: COMPUTER READABLE FORM: MEDIUM TYPE: Floppy NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS: ORIGINAL SOURCE: TISSUE TYPE: HYPOTHETICAL: | ANTI-SENSE: NO TOPOLOGY: li SEQUENCE CHARACTERISTICS: CLASSIFICATION: PRIOR APPLICATION DATA: APPLICANT: Cosman, TITLE OF INVENTION: FRAGMENT TELEFAX: (22
TEX: 756822 ADUAL
STREET: 51
Seattle TELEPHONE: (200) -- TELEPHONE: (206) 233-0644 STRANDEDNESS: APPLICATION NUMBER: US/09/058,264 FILING DATE: LENGTH: COUNTRY: 98101 nucleic TYPE: 2369 base pairs ucleic acid 51 University Street USA Mosley, linear Immunex Corporation ĕ N-terminal Floppy disk human placenta cDNA to single David J. Bruce Receptor US/08/308,881 32,172 08/249,553 for Oncostatin 5.1a 3

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 AACTTCCTGTTGATGTTCAGAATGGATTTATCAGAAATTATACTATATTTTATAGAACCA 1924
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Pred. No. 7.4e-20;
0; Mismatches 629;
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ANTI-SENSE:
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Sequence 1, Application US/09455962
Patent No. 6524817
GENERAL INFORMATION:
APPLICANT: MOSLEY, Bruce
APPLICANT: Cosman, David J.
                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 26
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 587-0430
TELEFAX: (206) 233-0644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Floppy COMPUTER: Apple Maci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: Recent TORRESS OF SECURION:
                                MOLECULE TYPE:
HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
FRAGMENT TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
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                                                                                                                                                                            TELEFAX: (20)
TELEFAX: 756822
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SOFTWARE: Micro Apple 7
                                                                                          TYPE: nucleion STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
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REGISTRATION NUMBER:
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CITY: Seattle
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Best Local Similarity
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FEATURE:
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TISSUE TYPE: human placenta
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                                                                                                                                               INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 26
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 587-0430
                HYPOTHETICAL:
                                 TOPOLOGY: 1i
MOLECULE TYPE:
                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 2369 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US OF FILING DATE: 09-SEP-1994
APPLICATION NUMBER: US OF FILING DATE: 26-MAY-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 98101
COMPUTER READABLE FORM:
                                                                 TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                        TELEFAX: (206
TELEX: 756822
                                                                                                                                                                                                                                                 NAME: Anderson, Kathryn A. REGISTRATION NUMBER: 32,172
                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE:
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                                                                                                                                                                                              TELEPHONE:
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TISSUE TYPE: hu
IMMEDIATE SOURCE:
CLONE: B10G/pDC
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Similarity 44.6%;
AGATTCCCAAGAGTGAGAAAAGGGTATCATCTGCAACTACACCATCTTTTACCAAGCTG
                                                                                                  CTGATGGACCAGGAAGCCCTGAATCCATAAAGGCATACCTTAAACAAGCTCCACCTTCCA 1804
                                                                                                                                 ATGACAAAGTTGGCGAGCCATATTCCATCCAGGCTTATGCCAAAGAAGGCGTTCCATCAG 1437
                                                                                                                                                                  ATTTAAGAGGGAACTTAGCAGAGAGCAAATGCTATTTGATAACAGTTACTCCAGTATATG
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                                AAGGACCTACTGTTCGGACAAAAAAAAGTAGGGAAAAACGAAGCTGTCTTAGAGTGGGACC
                                                                AAGGTCCTGAGACCAAGGTGGAGAACATTGGCGTGAAGACGGTCACGATCACATGGAAAG
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Pred. No. 7.4e-20;
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Patent No. 5965724
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: SHARKEY, ANDREW
APPLICANT: SMITH, STEPHEN K.
APPLICANT: DELLOW, KIMBERLEY A.
TITLE OF INVENTION: Gp 130 Lacking th
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTE
                                                                                                                                                               TELEFAX: (202)371-2540
NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                             NAME: ESMOND, ROBERT W.
REGISTRATION NUMBER: 32,893
REFERENCE/DOCKET NUMBER: 06
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)371-2600
                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 2754 base pair
                                                                                                                                                                                                                                                                               CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                               FEATURE:
                                                               MOLECULE TYPE:
          NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: L
                                                                             STRANDEDNESS: bo
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 19-MAF
                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0,
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                                                                                                                TYPE:
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SYSTEM: PC-DOS/MS-DOS
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                              AGGATGGTCCAGAATTCACTTTTACTACCCCAAAGTTTGCTCAAGGAGAAATTGAAGCCA
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                                                                                           CTTTGACTAGTGACATGTACATGGTACGAATGGCAGCATACACAGATGAAGGTGGGA
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                                          AAGAAGCTCCATGT - - - GGCCTGGAACTGTGGAGAGTCCTGAAACCAGCTGAGGCGGATG
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RESULT 9
US-09-312-611-5
; Sequence 5, Ap
; Patent No. 638
                                                                                                                                                                                                   ; LOCATION: US-09-312-611-5
                                                                                                                             Best Local Sir
Matches 516;
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 2754 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: SHARKEY, ANDREW
APPLICANT: SMITH, STEPHEN K.
APPLICANT: DELLOW, KIMBERLEY A.
TITLE OF INVENTION: Gpl30 Lacking the Transmembrane
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 06
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/0:
FILING DATE: 17-MAY-1999
CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: ESMOND, ROBERT W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC
OPERATING SYSTEM:
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TOPOLOGY: lir
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ZIP: 20005
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                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER:
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                                                                        724 CGTACAACCTCACGGGGCTGCAGCCTTTTACAGAATATGTCATAGCTCTGCGATGTGCGG
                                                                                                                                          h 4.08;
Similarity 44.68;
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                                                  CATTCACTGTCCAAGACCTTAAACCTTTTACAGAATATGTGTTTAGGATTCGCTGTATGA
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SYSTEM: PC-DOS/MS-DOS
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Pred. No. 8.1e-20;
0; Mismatches 629;
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RESULT 10
US-08-795-473B-4
; Sequence 4, Application US/08795473B
; Patent No. 6217858
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 4.0%;
Best Local Similarity 44.6%;
Matches 516; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (212)-997-1037
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 3085 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMUTER READBLE FORM:

MEDIUM TYPE: 3.5 inch disk
COMPUTER: IBM PC COMPALTIBLE
OPERATING SYSTEM: PC-DOS/MS-DO
SOFTWARE: MS-DOS EDITOR
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/795
FILING DATE: 11-FEB-1997
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
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APPLICANT: Nahot, Orit
APPLICANT: Blum, Herbert E.
TITLE OF INVENTION: A Pharmaceutical Composition for Treating
TITLE OF INVENTION: Hepatitis B Virus (HBV) Infection
NUMBER OF SEQUENCES: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: (212)-997-1028
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NAME: Davidson, Clifford M.
REGISTRATION NUMBER: 32,728
REFERENCE/DOCKET NUMBER: 963.1007
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CORRESPONDENCE ADDRESS:
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CITY: Ne
STATE: N
COUNTRY:
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         TTCAAGCTACTCACCCTGTAATGGATCTTAAAGCATTCCCCAAAGATAACATGCTTTGGG
                                                 AAAAATCATTTCAGTGCATTGAGGTCATGCAGGCCTTGCGTTGCTGAGGACCAGCTAGTGG
                                                                                               TTTCTTATAATTCTCTTGGGAAGTCTCCAGTGGCCACCCTGAGGATTCCAGCTATTCAAG 1137
                                                                                                                                                                                   ATGCCACAAAACTGA-----CAGTAAATCTCACAAATGATCGCTATCTAGCAACCCTAA 1456
                                                                                                                                                                                                                             ACACTACTAACCAGCAGCTTGAACTGCATCTGGGAGGCGAGAGCTTTTGGGTGTCTATGA 1077
                                                                                                                                                                                                                                                                            TCTTGGATTATGAAGTGACTCTCACAAGATGGAAATCACATTTACAAAATTACACAGTTA 1402
                                                                                                                                                                                                                                                                                                                      CACTTGGCTACAACATATGGTACTATCCAGAAAGCAACACTAACCTCACAGAAACAATGA 1017
                                                                                                                                                                                                                                                                                                                                                                GCTACAGAACTGTACAACTCGTGGGAAGACATTGCCTCCTTTTGAAGCCAATGGAAAAA 1342
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11-FEB-1997
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Pred. No. 8.7e-20;
0; Mismatches 629;
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US-09-439-856-4
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                                                                                                                                                                                      Patent No. 6410000
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Mahot, Orit
APPLICANT: Nahot, Orit
APPLICANT: Blum, Herbert E.
APPLICANT: Blum, Herbert E.
TITLE OF INVENTION: Hepatitis B Virus (HBV) Infection
TITLE OF INVENTION: Hepatitis B Virus (HBV) Infection
                                                                                                                                                                                                                                                                                                                                                                         Sequence
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: MS-DOS EDITOR
                                                                                           ADDRESSEE: Davi
STREET: 1140 Av
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036
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                                                                                                                                                                 E: Davidson, Davidson and Kappel,
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APPLICATION NUMBER: 08/797
ATTORNEY/AGENT INFORMATION:
NAME: Davidson, Clifford M.
REGISTRATION NUMBER: 32,728
REFERENCE/DOCKET NUMBER: 963.
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)-997-1028
TELEPHONE: (212)-997-1028
TELEPHONE: (212)-997-1037
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 3085 base pairs
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Matches 516;
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Similarity 44.6%;
CTGATGGACCAGGAAGCCCTGAATCCATAAAAGGCATACCTTAAACAAGCTCCACCTTCCA
                                   ATGACAAAGTTGGCGAGCCATATTCCATCCAGGCTTATGCCAAAGAAGGCGTTCCATCAG
                                                                                                                                                                       TGGACTCAGAGCCCACCACCCTTTCCTGGGAATCTGTGTCTCAGGCCACGAACTGGACGA 1317
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                                                                       ATTTAAGAGGGAACTTAGCAGAGGAGCAAATGCTATTTGATAACAGTTACTCCAGTATATG
                                                                                                                                               CAGATAAAGCACCCTGTATCACAGACTGGCAACAAGAAGATGGTACCGTGCATCGCACCT
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Pred. No. 8.7e-20;
0; Mismatches 629;
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RESULT 12
US-08-825-558-3
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TELEFAX: (204)...
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
SEQUENCE 1977 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                 REGISTRATION NUMBER: 32,893
REFERENCE/DOCKET NUMBER: 06
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: SHARKEY, ANDREW
APPLICANT: SMITH, STEPHEN K.
APPLICANT: DELLOW, KIMBERLEY A.
TITLE OF INVENTION: Gp 130 Lacking
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                            CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 1100 NEW YORK AVENUE CITY: WASHINGTON STATE: DC
                                                                                                                                                                                           NAME: ESMOND, ROBERT REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/0 FILING DATE: 19-MAR-1997
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TOPOLOGY:
                     STRANDEDNESS:
                                                                                                                                 TELEPHONE:
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 CTTTGACTAGTGACACATTGTACATGGTACGAATGGCAGCATACACAGATGAAGGTGGGA
                                     CCCTGAAACGAAAGACCTCTTACATTGTTCAGGTCATGGCCAGCACCAGTGCTGGGGGAA
                                                                          TCATTGGAAATGAAACTGCTGTGAATGTGGATTCTTCCCACAGAATATACATTGTCCT
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Pred. No. 1.6e-13;
0; Mismatches 536
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                      Matches
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REFERENCE/DOCKET NUMBER: 0623
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)371-2600
TELEPAY
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/0
FILING DATE: 17-MAY-1999
CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: ESMOND, ROBERT W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE:
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                                                        GCTACAGAACTGTACAACTCGTGTGGAAGACATTGCCTCCTTTTGAAGCCAATGGAAAAA
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1100 NEW YORK AVENUE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : (202)371-2600
(202)371-2540
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Pred. No. 1.6e-13;
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                                                                    PRIOR FILING DATE: 1998-09-25
NUMBER OF SEQ ID NOS: 32
SOFTWARE: FastSEQ for Windows
SEQ ID NO 25
                                                                                                                                                                                                                                                                                                                            Sequence 25, Application Patent No. 6472179 GENERAL INFORMATION:
                                                                                                                                                                                                          FILE REFERENCE: REG 203-A
CURRENT APPLICATION NUMBER: US/09/313,942
CURRENT FILING DATE: 1999-05-19
                                                                                                                                                                                                                                                                   APPLICANT: REGENERON PHARMACEUTICALS, INC.
TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS,
TITLE OF INVENTION: AND USING
                                                                                                                                                     PRIOR FILING DATE: 1999-05-19 PRIOR APPLICATION NUMBER: 60/
                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 09/313,942
          LENGTH: 3477
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
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; LOCATION: (1)...(3474)
US-09-313-942-25
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Best Local Similarity 44.5%;
Matches 440; Conservative
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    CCAACGGGACCAGCATAAATTTCAAGAC
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                                                                 CCCTGAAACGAAAGACCTCTTACATTGTTCAGGTCATGGCCAGCACCAGTGCTGGGGGAA
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                                                                                                                      TCATTGGAAATGAAACTGCTGTGAATGTGGATTCTTCCCACACAGAATATACATTGTCCT
                                                                                                                                                         AAGGTGGAAAAGGATTCTCCAAGACAGTCAATTCCAGCATCTTGCAGTACGGCCTGGAGT
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Pred. No. 2.3e-13;
0; Mismatches 536;
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Patent No. 6472179

GENERAL INFORMATION:

APPLICANT: REGENERON PHARMACEUTICALS, INC.

TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, ANI

TITLE OF INVENTION: AND USING

FILE REFERENCE: REG 203-A

CURRENT PILING DATE: 1999-05-19

PRIOR APPLICATION NUMBER: US/09/313,942

CURRENT FILING DATE: 1999-05-19

PRIOR APPLICATION NUMBER: 60/313,942

PRIOR FILING DATE: 1999-05-19

PRIOR FILING DATE: 1999-05-19

PRIOR APPLICATION NUMBER: 60/3101,858

PRIOR FILING DATE: 1998-09-25

NUMBER OF SEQ ID NOS: 32

SOFTMARE: FastSEQ for Windows Version 3.0
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; LOCATION: (1)...(3504)
US-09-313-942-23
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US-09-313-942-23
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TYPE: DNA
ORGANISM: HOMO
FEATURE:
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Similarity 44.5%;
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  CAGATAAAGCACCCTGTATCACAGACTGGCAACAAGAAGATGGTACCGTGCATCGCACCT
                                      TGGACTCAGAGCCCACCACCTTTCCTGGGAATCTGTGTCTCAGGCCACGAACTGGACGA 1317
                                                                                                   TGAAGTGGCAAAGCTCTGCTCTAGACGTGAACACTTGGATGATTGAATGGTTTCCGGATG
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                                                                                                                                                                                                                                        ACACTACTAACCAGCAGCTTGAACTGCATCTGGGAGGCGAGAGCTTTTGGGTGTCTATGA 1077
                                                                                                                                                           TTCAAGCTACTCACCCTGTAATGGATCTTAAAGCATTCCCCAAAGATAACATGCTTTGGG
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Search completed: August 4, 2003, 20:13:45 Job time: 145 secs

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Result
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(cgn2_6/ptodata/1/pubpna/USO9B_PUBCOMB.seq:*
(cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*
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(cgn2_6/ptodata/1/pubpna/USO9_NEW_PUB.seq:*
(cgn2_6/ptodata/1/pubpna/USOB_NEW_PUB.seq:*
(cgn2_6/ptodata/1/pubpna/USOB_NEW_PUB.seq:*
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
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US-10-006-265-16
US-09-892-949-53
US-10-006-265-1
US-09-892-949-4
                                                                                US-09-892-949-68

US-10-227-884-91

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US-10-218-631-91
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US-09-972-708-5
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	-10-232-223-	-10-230-436-9	0-227-882-9	0-227-881-9	-10-227-880-9	0-219-528-9	0-219-524-9	0-219-474-9	-10-219-470-9	0-219-072-9	0-233-205-9	0-219-536-9	'n	-10-219-468-9	0-218-956-9	-10-216-165-9	-10-232-233-9	0-232-231-9	0-230-260-9	0-219-481-9	0-219-479-9	19-466-	0-219-464-9	0-219-075-9	19-003-	0-230-434-9	219-076-9	-10-227-883-	0-227-873-9
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ALIGNMENTS

RESULT 1 US-09-892-949-1

GENERAL INFORMATION:

Sequence 1, Application US/09892949 Publication No. US20030096339A1

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                                                                                                                                         US-09-892-949-1
                                                                                                                                                                                                                                           SEQ ID NO 1
LENGTH: 2402
                                                                                     Query Match
Best Local
                                                                   Matches 2402;
                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60/214, 955
PRIOR FILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 60/267, 963
PRIOR FILING DATE: 2001-08-02
NUMBER OF SEQ ID NOS: 93
SOFTWARE: FastSEQ for Windows Version 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Whitmore, Theodore E.
APPLICANT: Kuijper, Joseph L.
APPLICANT: Maurer, Mark F.
TITLE OF INVENTION: CYTOKINE RECEPTOR ZCYTOR17
FILE REFERENCE: 00-42
                                                                                                                                                                                        TYPE: DNA
ORGANISM: HOMO S
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/892,949
CURRENT FILING DATE: 2001-06-26
PRIOR APPLICATION NUMBER: US 60/214,282
PRIOR FILING DATE: 2000-06-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Sprecher, Cindy A. APPLICANT: Presnell, Scott R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                       NAME/KEY: CDS
LOCATION: (171)...(2366)
                1 GGCACGAGGTGTGTGTGCAGTATGAAAATTGAGACAGGAAGGCAGAGTGTCAGCTTGTTC
1 GGCACGAGGTGTGTGCAGTATGAAAATTGAGACAGGAAGGCAGAGTGTCAGCTTGTTC
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Sequence

2101 CGCCCAGAAAATCCCAATACCTACGTTCGAGGATGCCAGAGGGGACCCCGCC 2221 AAGAGCAGCTTCTCTTTTCTGGTCAAAGTTTAGTACCAGATCATCTGTGTG.	Oy Db	1081 CTTATAATTCTCTTGGGAAGTCTCCAGTGGCCACCCTGAGGATTCCAGCTATTCAAGAAA 1140	J
2161 CGCCCAGAAAATCCCAATACCTACGTTCGAGGATGCCAGAGGGGAGCCGCCCAGAAGCCA	Qy	CTTATAATTCTCTTGGGAAGTCTCCAGTGGCCACCCTGAGGATTCCAGCTATTCAAGAA	
2101 TCAGGCCTGATTGTCCCCTGGGGAAAAGTTTTGAGGAGCTCCCAGTTTCACCTGAGATTC	Oy Db	1021 CTACTAACCAGCAGCTTGAACTGCATCTGGGAGGCGAGAGCTTTTTGGGTGTCTATGATTT 1080	• •
2041 CCAGAACGGGTCAGGAAAACAATTTAGGAGGGGAAAAGAATGGGTATGTGACCTGCCCCT 	Qy Db	961 TTGGCTACAACATATGGTACTATCCAGAAAGCAACACTAACCTCACAGAAACAATGAACA 1020 	
. 1981 TGATTGACAAGTTGGTGAACTTTGGGAATGTTCTGCAAGAATTTTCACAGATGAAG 	Qy Db	901 GAAGGCCAGTGCGGTTGTTATGGAAGAAGGCAAGAGGCAGCCCCAGTCCTAGAGAAAAACAC 960 '	
1921 ACTCTGTGAACACAGAAGACAGGATCTTAAAACCATGTTCCACCCCCAGTGACAAGTTGG	Qy Db	841 AAGAAGCTCCATGTGGCCTGGAAACTGTGGAGAGTCCTGAAACCAGCTGAGGCGGATGGAA 900 	
1861 GTATAGCCACATGGCATGAGATGATTTCAAGGATAAGCTAAACCTGAAGGAGTCTGATG	Оу	781 CGGTCAAGGAGTCAAAGTTCTGGAGTGACTGGAGCCAAGAAAAATGGGAATGACTGAGG 840 	
1801 AAAAACCCAACAAATTGACTCATCTGTGTTGGCCCACCGTTCCCAACCCTGCTGAAAGTA 	ду ръ	721 AAACGTACAACCTCACGGGGCTGCAGCCTTTTACAGAATATGTCATAGCTCTGCGATGTG 780 .	
1741 CTTCTCTGATTGGTGGAGGCCTTCTTATTCTCATTATCCTGACAGTGGCATATGGTCTCA	Qy Db	661 CAGTCAACAGTACCAGCTGGATGGAAGTCAACTTCGCTAAGAACCGTAAGGATAAAAACC 720 	
1	Qy Db	601 GGATAAAGCCTGAGTTGGCGCCTGTTTCATCTGATTTAAAATACACACTTCGATTCAGGA 660 	
1 1	Qy Db	541 CACCTAAGATTTTCCGTGTGAAACCAGTTTTGGGCATCAAACGAATGATTCAAATTGAAT 600 	
1561 GTGGAAAAGGATTCTCCAAGACAGTCAATTCCAGCATCTTGCAGTACGGCCTGGAGTCCC	Qy da	481 ATGGTGTAAATTAAATCTCATATGAACATACTGGAGATTAGAGAACATAGCGAAAACTGAAC 540	
21	Оу	421 TCCTTCCAAGAATAACGATCCCAGATAATTATACCATTGAGGTGGAAGCTGAAAATGGAG 480	
	Оу	361 AACATGATAATTGTACAACCAATAGTTCTACAAGTGAAAATCGTGCTTCGTGGTCTTTTT 420 	
1381 ACAAAGTTGGCGAGCCATATTCCATCCAGCTTATGCCAAAGAAGGCGTTCCATCAGAAG 	ОУ	301 CAGGAAAGGAAACCAGTTATACCCAGTACACAGTTAAGAGAACTTACGCTTTTTGGAGAAA 360 	
	оу оу	241 AGCCTGAGAACATTTCCTGTGTCTACTACTATAGGAAAAATTTAACCTGCACTTGGAGTC 300	
1261 ACTCAGAGCCCACCACCATTCCTGGGAATCTGTGTCTCAGGCCACGAACTGGACGATCC	Qy Db	181 CCTGGGCACTGTGGATGCTCCCCTCACTCTGCAAATTCAGCCTGGCAGCTCTGCCAGCTA 240	
	Оу	121 AATGTCCGCAAAACATTCTCTCCCCCAGCCTTCATGTGTTAACCTGGGGATGATGTGGA 180	
1141 AATCATTTCAGTGCATTGAGGTCATGCAGGCCTGCGTTGCTGAGGACCAGCTAGTGGTGA	Qy	61 CACCTCAGCTGGGAATGTGCATCAGGCAACTCAAGTTTTTCACCACGGCATGTGTCTGTG 120	
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557 557 617	GAGATGGTGTAATTAAATCT 497	437	377	QY		Qy	11; Length 2480;	Qy Db	Qy Db	HPR1 AND HPR2 Db	Qy Db	Qy	Qy Db		Qy	ATTTCTTGTGTCTGAAAAAC 2340	2280
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RESULT 3
US-09-972-708-5

US-09-972-708-5

Sequence 5, Application US/09972708

Publication No. US20030059871A1

GENERAL INFORMATION:

APPLICANT: Immunex Corporation
APPLICANT: Cosman, David J.

APPLICANT: Mosley, Bruce A.

APPLICANT: DuBose, Robert F.

APPLICANT: DuBose, Robert F.

APPLICANT: Wiley, Steven R.

TITLE OF INVENTION: HEMATOPOIETIN RECEPTORS |

FILE REFERENCE: 3160-B

CURRENT APPLICATION NUMBER: US/09/972,708

CURRENT FILING DATE: 2001-10-05

NUMBER OF SEQ ID NOS: 29

SOFTWARE: PatentIn version 3.1

SEQ ID NO 5

LENGTH: 2238

TYPE: DNA

ORGANISM: Homo sapiens
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APPLICANT: Kuijper, Joseph L.

APPLICANT: Maurer, Mark F.

TITLE OF INVENTION: CYTOKINE RECEPTOR ZCYTO:
FILE REFERENCE: 00-42
CURRENT APPLICATION NUMBER: US/09/892,949
CURRENT FILING DATE: 2001-06-26
PRIOR APPLICATION NUMBER: US 60 7
                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/214,282
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: US 60/214,955
PRIOR FILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 60/267,963
PRIOR FILING DATE: 2001-08-02
NUMBER OF SED ID NOS: 93
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 45
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Best Local S
Matches 2075
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LOCATION:
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                           GENERAL INFORMATION: Masattsugu
APPLICANT: Maeda, Masattsugu
APPLICANT: Waeda, No. US20030125520Aliko
TITLE OF INVENTION: NOVEL HEMOPOIETIN RECEPTC
FILE REFERENCE: 06501-096007
CURRENT APPLICATION NUMBER: US/10/006, 265
CURRENT FILING DATE: 2003-01-06
PRIOR APPLICATION NUMBER: PCT/JP00/03556
PRIOR APPLICATION NUMBER: JP 11/155797
PRIOR FILING DATE: 1999-06-02
PRIOR APPLICATION NUMBER: JP 11/217797
PRIOR APPLICATION NUMBER: JP 11/217797
PRIOR APPLICATION NUMBER: JP 11/217797
PRIOR FILING DATE: 1999-07-30
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 4.0
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 16
LENGTH: 2119
TYPE: DNA
CORGANISM: Homo Sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (11)...(1996)
US-10-006-265-16
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US-10-006-265-16
; Sequence 16, Application US/10006265
; Publication No. US20030125520A1
; GENERAL INFORMATION:
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Query Match 81.1%;
Best Local Similarity 100.0%;
Matches 1947; Conservative
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hi, No. US20030125520Aliko
NN: NOVEL HEMOPOIETIN RECEP
Score 1947; r; Pred. No. 0; Mismatches
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US-09-802-949-53
; Sequence 53, Application US/09892949
; Publication No. US20030096339A1
; GENERAL INFORMATION:
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APPLICANT: Sprecher, Cindy A. APPLICANT: Presnell, Scott R. APPLICANT: ORO, Zeren APPLICANT: Whitmore, Theodore I APPLICANT: Kuliper, Joseph L. APPLICANT: MAUTER, MATK F. TITLE OF INVENTION: CYTOKINE REC
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FILE REFERENCE: 00-42
CURRENT APPLICATION NUMBER: US/09/892,949
CURRENT FILING DATE: 2001-06-26
PRIOR APPLICATION NUMBER: US 60/214,282
PRIOR APPLICATION NUMBER: US 60/214,955
PRIOR FILING DATE: 2000-06-29
PRIOR FILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 60/267,963
PRIOR APPLICATION NUMBER: US 60/267,963
PRIOR APPLICATION NUMBER: US 60/267,963
PRIOR FILING DATE: 2001-08-02
NUMBER OF SEQ ID NOS: 93
SOFTWARE: FASUSEQ for Windows Version 3.0
SEQ ID NO 53
LENGTH: 2903
TYPE: DNA
ORGANISM: Homo sapiens
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58	Qy 498 CATATGACATAC 	Qy 438 ATCCCAGATAA1	Qy 378 ACCAATAGTTCT	Qy 318 TATACCCAGTAC	Qy 258 TGTGTCTACTAC 	Qy 198 CTCCCCTCACTC	Qy 138 CTCTCTCCCAG	Query Match Best Local Similarity 99. Matches 1945; Conservative	\sim	· > 0 -	TE OR	PRIOR APPLICATION NUMBER: PCT/JP00/03556 PRIOR FILING DATE: 2000-06-01 PRIOR APPLICATION NUMBER: JP 11/155797 PRIOR FILING DATE: 1999-06-02	; TITLE OF INVENTION: NOVEL HEM ; FILE REFERENCE: 06501-096001 ; CURRENT APPLICATION NUMBER: U ; CURRENT FILING DATE: 2003-01	; Publication No. US20030125520A1 ; GENERAL INFORMATION: ; APPLICANT: Maeda; Masatsugu ; APPLICANT: Yaguchi, No. US2003	RESULT 7 US-10-006-265-1 Sequence 1, Application	Qy 2058 AACAATTTAGGA 	Qy 1998 GTGAACTTTGGG	Db 2303 GACAGGATCTTA
	CATATGACATACTGGAGATTAGAGAACATAGCGAAAACTGAACCACCTAAGATTTTCCGT 557	ATCCCAGATAATTATACCATTGAGGTGGAAGCTGAAAATGGAGATGGTGTAATTAAATCT 497 	ACCAATAGTTCTACAAGTGAAAATCGTGCTTCGTGCTCTTTTTTCCTTCC	TATACCCAGTACACAGTTAÀGAGAACTTACGCTTTTGGAGAAAAACATGATAATTGTACA 377 	TGTGTCTACTACTATAGGAAAAATTTAACCTGCACTTGGAGTCCAGGAAAGGAAACCAGT 317 	CTCCCCTCACTCTGCAAATTCAGCCTGGCAGCTCTGCCAGCTAAGCCTGAGAACATTTCC 257	CCTGGGGATGATGTGGACCTGGGCACTGTGGATG 19	80.5%; Score 1932.8; DB 14; Length 2969; 99.8%; Pred. No. 0; tive 0; Mismatches 2; Indels 1; Gaps 1;	8)		SER: JP 11/217797 99-07-30 Windows Version 4.0	R: PCT/JP00/03556 -06-01 R: JP 11/155797	OF INVENTION: NOVEL HEMOPOIETIN RECEPTOR PROTEIN, NR10 REFERENCE: 06501-096001 REFERENCE: 06501-096001 RIT APPLICATION NUMBER: US/10/006,265 RIT FILING DATE: 2003-01-06	.25520A1 .sugu . US20030125520A1iko	US/1006265	AACAATTTAGGAGGGAAAAGAATGGG 2084 	GTGAACTTTGGGAATGTTCTGCAAGAAATTTTCACAGATGAAGCCAGAACGGGTCAGGAA 2057 	GACAGGATCTTAAAACCATGTTCCACCCCCAGTGACAAGTTGGTGATTGACAAGTTGGTG 2362
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APPLICANT: Kuijper, Joseph L.
APPLICANT: Maurer, Mark F.
TITLE OF INVENTION: CYTOKINE RECEPTOR ZCYTOR17
FILE REFERENCE: 00-42
CURRENT APPLICATION NUMBER: US/09/892,949
CURRENT FILING DATE: 2001-06-26
PRIOR APPLICATION NUMBER: US 60/214,282
PRIOR APPLICATION NUMBER: US 60/214,955
PRIOR FILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 60/214,955
PRIOR FILING DATE: 2000-06-29
PRIOR FILING DATE: 2000-06-39
PRIOR APPLICATION NUMBER: US 60/267,963
PRIOR FILING DATE: 2001-08-02
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LENGTH: 2196
TYPE: DNA
ORGANISM: Artificial Sequence
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SOFTWARE: FastSEQ for
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OTHER INFORMATION: n = A,T,C c
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CURRENT APPLICATION NUMBER: US/09/892,949
CURRENT FILING DATE: 2001-06-26
PRIOR APPLICATION NUMBER: US 60/214,282
PRIOR APPLICATION NUMBER: US 60/214,955
PRIOR FILING DATE: 2000-06-26
PRIOR FILING DATE: 2000-06-99
PRIOR FILING DATE: 2000-06-99
PRIOR APPLICATION NUMBER: US 60/267,963
PRIOR FILING DATE: 2001-08-02
NUMBER OF SEQ ID NOS: 93
SOFTWARE: PastSEQ for Windows Version 3.0
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Best Local Similarity
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LENGTH: 2295
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APPLICANT: Presnell, Scott
APPLICANT: Gao, Zeren
APPLICANT: Whitmore, Theo
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Sequence 91. Application U5/10227884
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GENRAL INFORMATION:
APPLICANT: BARET, KeVII P.
APPLICANT: BARET, KeVII P.
APPLICANT: Coddowski, Paul J.
APPLICANT: Coddowski, Paul J.
APPLICANT: Gedraid, Audrey,
APPLICANT: Godowski, Paul J.
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APPLICANT: STILIN, Victoria
APPLICANT: Watenabe, Colin L.
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APPLICATION NUMBER: 60/149320
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APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Watenabe, Colin L.
APPLICANT: Watenabe, Colin L.
APPLICANT: WOOG, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLITILE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P35391C96
CURRENT APPLICATION NUMBER: US/10/230.163
CURRENT ETLING DATE: 2002-08-28
PRIOR APPLICATION NUMBER: 60/062287
PRIOR APPLICATION NUMBER: 60/063549
PRIOR APPLICATION NUMBER: 60/063549
PRIOR APPLICATION NUMBER: 60/063549
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064103
PRIOR FILING DATE: 1997-10-31
PRIOR APPLICATION NUMBER: 60/069873
PRIOR APPLICATION NUMBER: 60/078910
PRIOR APPLICATION NUMBER: 60/078910
PRIOR APPLICATION NUMBER: 60/079294
PRIOR FILING DATE: 1998-03-26
PRIOR APPLICATION NUMBER: 60/079728
PRIOR APPLICATION NUMBER: 60/079728
PRIOR APPLICATION NUMBER: 60/081819
PRIOR FILING DATE: 1998-03-26
PRIOR APPLICATION NUMBER: 60/082804
PRIOR FILING DATE: 1998-03-27
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PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/082804
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PRIOR FILING DATE: 1998-04-22
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Gerritsen, Mary
Goddard, Audrey
Goddwski, Paul J.
Grimaldi, J. Christopher
Grimaldi, J. Christopher
Gurney, Austin L.
Smith, Victoria
Stephan, Jean-Philippe F.
Watanabe, Colin L.
Wood, William I.
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	NUMBER: 60/1 1999-05-14 NUMBER: 60/1 1999-06-22 NUMBER: 60/1 1999-06-22 NUMBER: 60/1 1999-06-23 NUMBER: 60/1 1999-07-20 NUMBER: 60/1 1999-07-26 NUMBER: 60/1 1999-07-28 NUMBER: 60/1 1999-07-28 NUMBER: 60/1 1999-08-03	. NOMBE SECOND S	ER: 60/1 8-10-30 8-11-03 8-11-17 ER: 60/1 8-11-17 18-11-17 18-11-18 8-11-18 8-12-23 ER: 60/1 8-12-23 ER: 60/1 8-12-23 ER: 60/1 8-12-23 ER: 60/1 8-12-23 ER: 60/1 8-12-23 ER: 60/1 8-12-23 ER: 60/1

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FILING DATE: 1998-01
APPLICATION NUMBER:
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1998-08-04 NUMBER: 60/095916

1998-08-10

OR APPLICATION NUMBER: 60/96146
OR FILING DATE: 1998-08-11
OR APPLICATION NUMBER: 60/096791
OR FILING DATE: 1998-08-17
OR APPLICATION NUMBER: 60/097986
OR APPLICATION NUMBER: 60/098544
OR APPLICATION NUMBER: 60/098544
OR APPLICATION NUMBER: 60/098544
OR APPLICATION NUMBER: 60/098544
OR FILING DATE: 1998-08-31

OR APPLICATION NUMBER: 60/099596
R FILLING DATE: 1998-09-09
DR APPLICATION NUMBER: 60/099598
DR FILLING DATE: 1998-09-09
DR APPLICATION NUMBER: 60/099803
DR FILING DATE: 1998-09-10

APPLICATION NUMBER: 60/099812

APPLICATION NUMBER:

60/099811

FILING DATE: 1998-09-10

APPLICATION NUMBER: 60/099816 FILING DATE: 1998-09-10

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APPLICATION NUMBER: 60/095302 FILING DATE: 1998-08-04 APPLICATION NUMBER: 60/095318

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DR APPLICATION NUMBER: 60/101916
DR FILING DATE: 1998-09-24
PR APPLICATION NUMBER: 60/101922
DR FILING DATE: 1998-09-24
DR APPLICATION NUMBER: 60/106178
DR APPLICATION NUMBER: 60/106248
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PRIOR PRIOR

APPLICATION NUMBER: 60/100919
FILING DATE: 1998-09-17
APPLICATION NUMBER: 60/101477
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APPLICATION NUMBER: 60/101738
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60/100848

APPLICATION NUMBER: 60/ FILING DATE: 1998-09-16 APPLICATION NUMBER: 60/100390 FILING DATE: 1998-09-15 APPLICATION NUMBER: 60/ FILING DATE: 1998-09-15

60/100627

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1998-09-11

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APPLICATION NUMBER: 60/090695 FILING DATE: 1998-06-25 APPLICATION NUMBER: 60/091982 FILING DATE: 1998-07-07

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60/089532

APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/086392 FILING DATE: 1998-05-22

DR APPLICATION NUMBER: 60/089538

OR FILING DATE: 1998-06-17

DR APPLICATION NUMBER: 60/089905

OR FILING DATE: 1998-06-18

DR APPLICATION NUMBER: 60/090472

OR FILING DATE: 1998-06-24

DR APPLICATION NUMBER: 60/090557

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DR APPLICATION NUMBER: 60/090691

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US-107-230-338-91
Sequence 91, Application US/10230338
Publication No. US20030044934A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Besnoyers, Luc
APPLICANT: Gerritsen, Mary
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Austin L.
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Smith, Victoria
APPLICANT: Watanabe, Colin L.
APPLICANT: Watanabe, Colin L.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SCRETED AND TRANSMEMBRANE POL
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FULE REFERENCE: P353071C92
CURRENT FILING DATE: 2002-08-28
PRIOR APPLICATION NUMBER: US/10/230,338
CURRENT FILING DATE: 2002-08-28
PRIOR APPLICATION NUMBER: 00/059113
PRIOR APPLICATION NUMBER: 60/059113
PRIOR APPLICATION NUMBER: 60/05287
PRIOR APPLICATION NUMBER: 60/062287
PRIOR FILING DATE: 1997-10-17
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Remaining Prior Appli
NUMBER OF SEQ ID NOS:
SEQ ID NO 91
LENGTH: 2445
TYPE: DNA
ORGANISM: Homo Sapie
FEATURE:
NAME/KEY: unsure
LOCATION: 2424
US-10-230-338-91
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OR FILING DATE: 1997-10-28
OR APPLICATION NUMBER: 60/064103
OR FILING DATE: 1997-10-31
OR APPLICATION NUMBER: 60/0769873
OR FILING DATE: 1997-12-17
OR APPLICATION NUMBER: 60/078910
OR FILING DATE: 1998-03-20
OR APPLICATION NUMBER: 60/079294
OR FILING DATE: 1998-03-25
OR APPLICATION NUMBER: 60/079656
OR FILING DATE: 1998-03-26
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US-10-218-631-91
Sequence 91, Application US/10218631
Publication No. US20030045687A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Desnoyers, Luc
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APPLICANT: Guiney, Ausclin L.
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Watanabe, Colin L.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE OF INVENTION: ACIDS ENCODING THE SAME
FRIDE FILING DATE: 1998-03-25
FRIOR APPLICATION NUMBER: 60/079728
FRIOR APPLICATION NUMBER: 60/079728
FRIOR APPLICATION NUMBER: 60/079728
FRIOR FILING DATE: 1998-03-26
FRIOR FILING DATE: 1998-03-27
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Best I
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Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Smith, Victoria
Stephan, Jean-Philippe F.
GAAAGGAAACCAGTTATACCCAGTACACAGTTAAGAGAACTTACGCTTTTGGAGAAAAAC
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	Db	Qy 4 ACGAGGTGTGTGCAGTATGAAAATTGAGACAGGAAGGCAGAGTGTCAGCTTGTTCCAC 63
1084 ATAATTCTCTTGGGAAGTCTCCAGTGGCACCCTGAGGGTTCCAGGTATTCAAGAAAAT	, dd , dd	Query Match 65.3%; Score 1568.4; DB 14; Length 2445; Best Local Similarity 99.3%; Pred. No. 0; Matches 1575; Conservative 0; Mismatches 11; Indels 0; Gaps 0;
	Db Dy	; NAME/REY: UNSUIE ; LOCATION: 2424 ; OTHER INFORMATION: Unknown base US-10-230-414-91
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844 AAGCTCCATGTGGCCTGGAACTGTGGAGAGTCCTGAAACCAGCTGAGGCGGATGGAAGAA	Ор	PRIOR FILING DATE: 1998-0 Remaining Prior Applicati NUMBER OF SEQ ID NOS: 246 SEQ ID NO 91
784 TCAAGGAGTCAAAGTTCTGGAGTGACTGGAGCCAAGAAAAATGGGAATGACTGAGGAAG 	Фр	
724 CGTACAACCTCACGGGGCTGCAGCCTTTTACAGAATATGTCATAGCTCTGCGATGTGCGG	Qу	
664 TCAACAGTACCAGCTGGATGGAAGTCAACTTCGCTAAGAACCGTAAGGATAAAAACCAAA	Оу	
604 TAAAGCCTGAGTTGGCGCCTGTTTCATCTGATTTAAAATACACACTTCGATTCAGGACAG 	Дb	
544 CTAAGATTTTCCGTGTGAAACCAGTTTTGGGCATCAAACGAATGATTCAAATTGAATGGA 	Qy Db	CURRENT FILING DATE: 2002-08-28 PRIOR APPLICATION NUMBER: 10/119,480 PRIOR FILING DATE: 2002-04-09 PRIOR APPLICATION NUMBER: 60/059113
484 GTGTAATTAAATCTCATATGACATACTGGAGATTAGAGAACATAGCGAAAACTGAACCAC 	Qy Db	; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC ; TITLE OF INVENTION: ACIDS ENCODING THE SAME ; FILE REFERENCE: P3530P1C98 ; CURRENT APPLICATION NUMBER: US/10/230.414
424 TTCCAAGAATAACGATCCCAGATAATTATACCATTGAGGTGGAAGCTGAAAATGGAGATG 	. Qy Db	; APPLICANT: Smith, Victoria ; APPLICANT: Stephan, Jean-Philippe F. ; APPLICANT: Watanabe, Colin L. ; APPLICANT: Wood, William I.
364 ATGATAATTGTACAACCAATAGTTCTACAAGTGAAAATCGTGCTTCGTGCTCTTTTTTCC	Оу	
304 GAAAGGAAACCAGTTATACCCAGTACACAGTTAAGAGAACTTACGCTTTTGGAGAAAAAC	Qy	GENERAL INFORMATION: APPLICANT: Baker, Keyin P. APPLICANT: Desnoyers, Luc APPLICANT: Gorritson Mary
244 CTGAGAACATTTCCTGTGTCTACTACTATAGGAAAAATTTAACCTGCACTTGGAGTCCAG 	Оу	RESULT 14 US-10-230-414-91 ; Sequence 91, Application US/10230414 ; Publication No. US20030050448A1
184 GGGCACTGTGGATGCTCCCCTCACTCTGCAAATTCAGCCTGGCAGCTCTGCCAGCTAAGC	Оу	10111111111111111111111111111111111111
124 GTCCGCAAAACATTCTCTCTCCCCAGCCTTCATGTGTTAACCTGGGGATGATGTGGACCT	ДУ	
64 CTCAGCTGGGAATGTGCATCAGGCAACTCAAGTTTTTCACCACGGCATGTGTCTGTGAAT 	Qу	OY 1444 CTGAGACCAAGGTGGAGAACATTGGCGTGAAGACGGTCACGATCACATGGAAAAGAGATTC 1503

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US-10-216-159A-91

Sequence 91. Application US/10216159A

Publication No. US20030069397Al

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.

APPLICANT: Baker, Kevin P.

APPLICANT: Goddard, Audrey

APPLICANT: Sephan, Jean-Philippe F.

APPLICANT: Smith, Victoria

APPLICANT: Stephan, Jean-Philippe F.

APPLICANT: Wood, William I.

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND 
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                    Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new.
                                                                    Carninci,P. and Hayashizaki,Y.
High-efficiency full-length cDNA
Meth. Enzymol. 303, 19-44 (1999)
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Group Phase I 6 II Team.

Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs

AL Nature 420, 563-573 (2002)

CE 6 (bases 1 to 2232)

RRS Adachi,J., Aizawa,K., Akimura,T., Arakawa,T., Bono,H., Carninci,P., Fukuda,S., Furuno,M., Hanagaki,T., Hara,A., Hashirume,W., Hayatsu,N., Hiramoto,K., Hiraoka,T., Hirozane,T., Hayashida,K., Hayatsu,N., Hiramoto,K., Hiraoka,T., Kouda,M., Katoh,H., Kawal,J., Kojima,Y., Kondo,S., Konno,H., Kouda,M., Koya,S., Kurihara,C., Matsuyama,T., Miyazaki,A., Murata,M., Nakamura,M., Nishi,K., Nomura,K., Numazaki,R., Ohno,M., Ohsato,N., Okazaki,Y., Saito,R., Saitoh,H., Sakai,C., Sakai,K., Sakayama, Sano,H., Sasaki,D., Shibata,K., Shinagawa,A., Shitaki,T., Sagobe,Y., Tagami,M., Tagawa,A., Takahashi,F., Takaku-Akahira,S., Muramatsu,M. and Hayashizaki,Y.

Direct Submission

Direct Submission
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                                                                                                                                                                                                                                                                                            Submitted (16.JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.go.jp, URL:http://genome.gsc.riken.go.jp/, Tel:81-45-503-9222,
                                                                                 prepare mouse tissues.
Please visit our web site for further details
                                                                                                                                                                        cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group Genomic Sciences Center and Genome Science Laboratory in R
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                                                                                                                                               Division of Experimental Animal Research
                                                                                                                                                                                                                                                                         URL:http://genome.gsc.riken.go.jp/,
Fax:81-45-503-9216)
                            URL:http://fantom.gsc.riken.go.jp/
                                                        URL:http://genome.gsc.riken.go.jp/
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/db_xref="G1:26336509"
/tanslation="MASTRAGGTNGVRINFKTLSISVEEIVLLTSLVGGGLLLLSIKT
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VTFGLRKPNRLTPLCCPDVPNPAESSLATWLGDGFKKSNMKETGNSGDTEDVVLKPCP
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/clone_lib="RIKEN full-length enriched mouse
/dev_stage="adult"
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                                                                                                                                            Email: genome-res@gsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp/
Carninci,P., Shibata,Y., Hayatsu,M., Sugahara,Y., Shibata,K., It,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes. Genome Res. 10 (10), 1617-1630 (2000)
wagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E.,
Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsu,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and
                                                                                                                                                                                                                                                                                                                                                                       Laboratory for Genome Exploration research
Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Re
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BB617934 RIKEN full-length enriched, musculus cDNA clone 5330424C19 5', mR
                                              sequencing pipeline with 300 murricary 10 (11), 1757-1771 (2000) Konno,H., Fukunishi,Y., Shibata,K.,
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EST.
                                                                                                                                                                                                                                                                                                                                                                     1-7-22 Suehiro-cho,
Tel: 81-45-503-9222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Yoshihide Hayashizaki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished
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1 (bases 1 to 663)
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                                                                                                                Hayashizaki,Y.
RIKEN integrated sequence
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                    Computer-based methods for the
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84 multicapillary sequencer. Genome
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nonredundant cDNA library. Genome Res. 11 (2) Yamanaka I., Kiyosawa,H., Kondo,S., Saito,T., K., Fukuda,S., Hara,A., Itoh,M., Kawai,J., Shi Ishii,Y. and Hayashizaki,Y.
Mapping of 19032 mouse cDNAs on mouse chromose Func. Genomics 2 pre, L72-L86 (2001
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e mouse tissues.
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                                     GCATATGGTCTCAAAAAACCCAACAAATTGACTCATCTGTGTTGGCCCACCGTT-CCCAA
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pituitary gland"
/note="Site_1: Sall; Site_2: BamHI; cDNA library was
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/mol_type="mRNA"
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/dev_stage="adult"
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Clones are derived from the chimpanzee BAC library PTB This BAC end was generated during the R&D process and may have higher chance of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pan troglodytes DNA, clone: FAG138991
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Totoki,Y., Watanabe,H. and Sakaki,Y.
BAC end sequences of Library PTB
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Totoki,Y., Watanabe,H. and Sakaki,Y.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.
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                                                                                                      LIBRARY
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                                                           AGGAGGGGAAAAGAATGGGTATGTGACCTGCCCCTTCAGGCCTGATTGTCCCCTGGGGAA
                                                                                                                                                                                    CTTAAAACCATGTTCCACCCCCAGTGACAAGTTGGTGATTGACAAGTTGGTGATGACTT 2005
                                                                                                                                                                                                                               CTTAAAACCATGTTCCACCCCCAGTGACAAGTTGGTGATTGACAAGTTGGTGGTGAACTT
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                                           AGGAGGGGAAAAGAATGAGTATGTGACCTACCCCTTCAGGCCTGACTGTCCCCTGGGGAA
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                                                                                                                                                                                                                                                                                                                                                                       155
                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Vector : pKS145
R.Site 1 : SacI
R.Site 2 : SacI.
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                                                                                                                                                                                                                                                                                                                                                                 /cell_type="lymphoblast"
/clone_lib="PTB Chimpanzee Male BAC Library"
172 c 120 g 165 t
                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="genomic DN/
/db_xref="taxon:9598"
/clone="PTB-153F12.F"
/sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Pan troglodytes"
/mol_type="genomic DNA"
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Pred. No. 8.4e-57;
0; Mismatches 9;
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PTB-153F12.F,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Taylor, T.D.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                             1341
1401 TCCATCCAGGCTTATGCCAAAGAAGGCGTTCCATCAGAAGGTCCTGAGACCAAGGTGGAG 1460
                                                                                                                                                                                     1281 TCCTGGGAATCTGTGTCTCAGGCCACGAACTGGACGATCCAGCAAGATAAATTAAAACCT 1340
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PO Box 88, Manch
Tel: 01612008930
Fax: 01612360409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Simon Hubbard
Department of Biomolecular Sciences
University of Manchester Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Boardman, P.E., Sanz-Ezquerro, J., Overton, I.M., I
Fong, W.T., Tickle, C., Brown, W.R.A., Wilson, S.A.
A Comprehensive Collection of Chicken cDNAs
Curr._Biol. 12 (22), 1965-1969 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gallus gallus (chicken)
Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae; Gallus.
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                                                                                                                                                                                                                                                           Similarity
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                                             TTTGTATGCTACAACATGTCAGTGTATCCTATCTATGAAAATAAAGTAGCAGCTCCATAT
                                                                                          TTCTGGTGCTATAACATCTCTGTGTATCCAATGTTGCATGACAAAGTTGGCGAGCCATAT 1400
                                                                                                                                        (bases 1 to 653)
                                                                                                                                                                                                                                                                                                                                                      233
                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                          /note="organ: ovary; Vector: pBluescript II KS(+); Site_1: EcoRI; Site_2: Not1; This normalized library was constructed from 1 million independent clones. cDNA synthesis was initiated using an oligo(dT) primer, using methylated C in the first strand synthesis reaction. Following this first strand reaction, double-stranded cDNA was blunted, ligated to NotI adapters, digested with EcoRI; size-selected, and cloned into the NotI and EcoRI compatible sites of a custom modified MCS of the pBluescript (KS+) vector. The library was normalized in 2 rounds using conditions adapted from Soares et al., PNAS (1994) 91: 9228-9232 and Bonaldo et al., Genome Research 6 (1995): 791 except that a significantly longer reannealing hybridization was used."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Simon.Hubbard@umist.ac.uk.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Gallus gallus"
/mol_type="mRNA"
/strain="Layer"
/db_xref="taxon:9031"
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/lab_host="DH10B"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone="ChEST708c5"
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58.7%;
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                                                                                                                                                                                                                                                        Score 197; DB 13; Pred. No. 9.5e-47;
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AQ022781
                                                                                      FEATURES
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                                                                                                                                                                                                                                                                                                                    Contact: Mahairas GG, Wallace JC,
High Throughput Sequencing Center
University of Washington
401 Queen Anne Avenue Worth, Seat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AQ022781 459 bp DNA linear GSS 16-JUI HS_2180_A2_B11_MR CIT Approved Human Genomic Sperm Library D I sapiens genomic clone Plate=2180 Col=22 Row=C, genomic survey
                                                                                                                                                                                                                           Tel: (206) 616-3618
Fax: (206) 616-3887
Email: jwallace@u.washington.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mahairas.G.G., Wallace,J.C., Smith,K., Swartzell,S., Wahairas.G.G., Wallace,J.C., Smith,K., Swartzell,S., voller a. Shaker.R., Furlong,J., Young,J., Zhao,S.,
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                                                                                                                   quality sequence stop: 459
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  /organism="Homo sapiens"
/mol_type="genomic DNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CA561173 592 bp mRNA linear EST 19-msculus cDNA clone NIA:K0283D09 IMAGE:30052652 5', mRNA se
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Dawood B. Dudekula Laboratory of Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 592)
Piao,Y., Kargul,G.J., Dudekula,D.B., Qian,Y.,
Martin,P., Alba,K., Tanaka,T. and Ko,M.S.H.
Systematic Analyses of NIA Mouse Unfertilized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CA561173.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     National Institute on Aging/National Institutes of Health 333 Cassell Drive, Suite 4000, Baltimore, MD 21224-6820,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Other_ESTs: K0283D09-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: cdna@lgsun.grc.nia.nih.gov
Plate: K0283 row: D column: 09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCTGGAGTGACTGGAGCCAAGAAAAAATGGGAATGACTGAGGAAGAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        primer: M13 Reverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       quality sequence stop: 592
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                    /note="Vector: psporT1 (Invitrogen); Site_1: Sal1; Site_NotI; Mouse cDNA project by the Laboratory of Genetics, National Institute on Aging (NIA), Intramural Research Program, NIH (http://lgsun.grc.nia.nih.gov/cDNA). This a long-transcript enriched cDNA library (Ref. Genome Research Library (Ref. Genome R
extracted from a pool of 1488 unfertilized
                                                                                                                                                                                                                                                            /tissue_type="Unfertilized Egg"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                            /db_xref="niaEST:K0283D09-5N"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Mus musculus"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone="Plate=2180 Col=22 Row=C"
                                                                                                                                                                                                               /clone_lib="NIA Mouse Unfertilized
                                                                                                                                                                                                                                                                                                              /clone="NIA:K0283D09 IMAGE:30052652"
                                                                                                                                                                                                                                                                                                                                                                                                    /strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Metazoa; Chordata;
Butheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GI:25105828
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Pred. No. 6e
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oved Human Genomic Sperm Vector: pBeloBAC11; BAC
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Egg cDNA Library (Long

Site_2

eggs

Res

21224-6820, USA

Egg cDNA Library

Luo,A.,

Stagg, C.A.,

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SOURCE
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            191
                                                                                                                                                                                                                                                                                                                 K0279C07-5N NIA MOUSE Unfertilized Egg cDNA Library (Long) Mus musculus cDNA clone NIA:K0279C07 IMAGE:30052254 5', mRNA sequence. CA560924
                                                                           Contact: Dawood B. Dud
Laboratory of Genetics
                                             Unpublished Other_ESTs: K0279C07-3
                                                                                                                                                                                                                                    Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                  CA560924.1 GI:25105579
                                                                                                                                                                                         Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATTTCCTGTGTCTACTATAGGAAAAATTTAACCTGCACTTGGAGTCCAGGAAAGGA 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGGATGCTCCCCTCACTCTGCAAATTCAGCCTGGCAGCTCTGCCAGCTAAGCCTGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAAATCTGACATCACATATTGGCATTTAATCTCCATAG 592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAAATCTCATATGACATACTGGAGATTAGAGAACATAG 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACCAGTTATACCCAGTACACAGTTAAGAGAACTTACGCTTTTGGAGAAAAACATGATAA 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGGGCATTCTCTTTCCTCTGCAAATTCAGCCTGGCAGTCCTGCCGACTAAGCCAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCAATGCCCCCAGACATCTGCAGTGTTGAAGTACAAGCTCAAAATGGAGATGGTAAAGT 554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATAACGATCCCAGATAATTATACCATTGAGGTGGAAGCTGAAAATGGAGATGGTGAAT 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACCAATGATACCAGCTACATTGTGACTTTGACTTACTCCTATGGA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATTTCCTGCGTCTTTTACTTCGACAGAAATCTGACTTGCACTTGGAGACCAGAGAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAACCTTCATGAATAACAGCCTCTGGGTGTGAACGCTGGAATAATGTGGACCTTGGCACT 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ----AAAAGCAATTATAGTGACAATGCTACAGAGGCTTCATATTCTTTTCCCCGTTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            156
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   treated with T4 DNA polymerase, and purified by ethanol-precipitation. The cDNAs were ligated to Lone-linker LL-Sal4, purified by phenol/chloroform, and separated from free linkers by Centricon 100. Then, the cDNAs were amplified by long-range high fidelity PCR using Ex Taq polymerase (Takara) with a primer Sal4-S. The products were purified by phenol/chloroform and Centricon 100. The cDNAs were digested with Sal1 and NotI enzymes and cloned into Sal1/NotI site of pSPORTI plasmid vector. The DHIOB E. coli host was transformed with the ligation mixture by the standard chemical method. The average insert size is about 2.5 kb. The library was constructed by Yulian Piao (NIA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           primer (Invitrogen:
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                         B. Dudekula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 155.2; DE Pred. No. 2.7e-3 0; Mismatches 1
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                                                                                                                                                                                       Craniata; Vertebrata;
Sciurognathi; Muridae;
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                                                                                                                                                                                                            Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18;
                                                                                                                                                                                         Murinae; Mus
                                                                                                                                              Stagg, C.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   332
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RESULT 7 CA560924

COMMENT

399

ATTATACCATTGAGGTGGAAGCTGAAAATGGAGATGGTGTAATTAAATCTCATATGACAT 507

GTGACAATGCTACAGAGGCTTCATATTCTTTTCCCCGTTCCTGTGCAATGCCCCCAGACA

398

TCTGCAGTGTTGAAGTACAAGCTCAAAATGGAGATGGTAAAGTTAAATCTGACATCACAT

c

TITLE

REFERENCE

AUTHORS

KEYWORDS VERSION ACCESSION õ 밁 δÃ В Q DЬ Ş 밁 δÃ В Š 밁

247;

Conservative

0;

Similarity

64.8%;

Score 149.4; DB 1 Pred. No. 1.2e-32; Mismatches 116;

DB 14;

Indels 18; Length 479;

177 208 117

TCTGCAAATTCAGCCTGGCAGCTCTGCCAGCTAAGCCTGAGAACATTTCCTGTGTCTACT 267

AGCCTTCATGTGTTAACCTGGGGATGATGTGGACCTGGGCACTGTGGATGCTCCCCTCAC 207

ATCCTCTGGGTGTGAACGCTGGGAATAATGTGGACCTTGGCACTGTGGGCATTCTCTTTCC

176

ACTATAGGAAAAATTTAACCTGCACTTGGAGTCCAGGAAAGGAAACCAGTTATACCCAGT TCTGCAAATTCAGCCTGGCAGTCCTGCCGACTAAGCCAGAGAACATTTCCTGCGTCTTTT

327

236

296

ACACAGTTAAGAGAACTTACGCTTTTGGAGAAAAACATGATAATTGTACAACCAATAGTT 387

ATATTGTGACTTTGACTTACTCCTATGGA-------AAAAGCAATTATA

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BASE COUNT
ORIGIN
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Plate: K0279 row: C column: 07
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                                                                                                       mixture by the standard chemical method. The average insert size is about 2.5 kb. The library was constructed by vulan plao (NIA)." 117~c~102~g~133~t
                                                                                                                                                                                                                                                                                                                                                                                                                           NotI; Mouse cDNA project by the Laboratory of Genetics, National Institute on Aging (NIA), Intranural Research Program, NIH (http://lgsun.grc.nia.nih.gov/cDNA). This is a long-transcript enriched cDNA library (Ref. Genome Res. 11: 153-1558 (2001). [PMID: 11544199]). Total RNAs were extracted from a pool of 1488 unfertilized eggs.
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lab_host="DH10B"
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/strain="C57BL/6J"
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RESULT 8
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    National Institute on Aging/National Institutes of Health 333 Cassell Drive, Suite 4000, Baltimore, MD 21224-6820, USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus
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K0266 row: C column: 03
                                                                                                                                                                                                treated with 74 DNA polymerase, and purified by ethanol-precipitation. The cDNAs were ligated to Lone-linker Li-Sal4, purified by phenol/chloroform, and separated from free linkers by Centricon 100. Then, the cDNAs were amplified by long-range high fidelity PCR using Ex Tag polymerase (Takara) with a primer Sal4-S. The products were purified by phenol/chloroform and Centricon 100. The cDNAs were digested with Sali and NotI enzymes and cloned into Sali/NotI site of pSPORTI plasmid vector. The DH10B E. coli host was transformed with the ligation
                                                                                                                           mixture by the standard chemical method. The average insert size is about 2.5 kb. The library was constructed by Yulan Piao (NIA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Program, NIH (http://lgsun.grc.nia.nih.gov/cDNA). This is a long-transcript enriched cDNA library (Ref. Genome Res. 11: 1553-1558 (2001). [PWID: 11544199]). Total RNAs were extracted from a pool of 1488 unfertilized eggs.
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/note="Vector: pSPORT1 (Invitrogen); Site_1: Sall; Site_2:
NotI; Mouse cDNA project by the Laboratory of Genetics,
National Institute on Aging (NIA), Intramural Research
National Institute on Aging (NIA), Intramural Research
National Institute on Aging (NIA), Intramural Research
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/db_xref="taxon:10090"
/clone="NIA:K0266C03 IMAGE:30051002"
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/strain="C57BL/6J"
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/lab_host="DH10B"
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Sciurognathi; Muridae;
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RESULT 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           311 AACCAGTTATACCCAGTACACAGTTAAGAGAACTTACGCTTTTGGAGAAAAACATGATAA 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       333 CATTTCCTACGTCTTTTACTTCGACAGAAATCTGACTTGCACTTGGAGACCAGAGAAGGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  495 TGCAATGCCCCCAGACATCTGCAGTGTTGAAGTACAAGCTCAAAATGGAGATGGT 549
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Other_ESTs: K0202F08-3
Contact: Dawood B. Dudo
Laboratory of Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               K0202F08-5N NIA Mouse Unfertilized Egg cDNA Library (Long) Mus musculus cDNA clone NIA:K0202F08 IMAGE:30044899 5', mRNA sequen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Martin, P., Aiba, K., Tanaka, T. and Ko, M.S.H. Systematic Analyses of NIA Mouse Unfertilized
                                                                                                                                                                                                                                                                                                                                                                                                                                Seq primer: M13 Reverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Plate: K0202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          National Institute on Aging/National Institutes of Health 333 Cassell Drive, Suite 4000, Baltimore, MD 21224-6820, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Piao, Y., Kargul, G.J., Dudekula, D.B., Qian, Y.,
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(bases 1 to 546)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    cdna@lgsun.grc.nia.nih.
K0202 row: F column:
/note="Vector: pspORT1 (Invitrogen); Site_1: SalI; Site_2 NotI; Mouse cDNA project by the Laboratory of Genetics, National Institute on Aging (NIA), Intramural Research Program, NIH (http://lgsun.grc.nia.nih.gov/cDNA). This is a long-transcript enriched cDNA library (Ref. Genome Res. 11: 1553-1558 (2001). [PMID: 11544199]). Total RNAs were
                                                                                                                                                                            /tissue_type="Unfertilized
/lab_host="DH10B"
                                                                                                                                                                                                                                   /strain="C57BL/6J"
/db_xref="niaEST:K0202F08-5N"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                     /organism="Mus musculus"
/mol_type="mRNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stagg, C.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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RESULT 10
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ORGANISM
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Best Local S
Matches 226
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Other_ESTs: H4061G10-3
Contact: Yong Qian
Laboratory of Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                     BQ560019 487 bp mr
H4061G10-5 NIA Mouse 7.4K CDNA Clone
H4061G10 5', mRNA sequence.
BQ560019 BQ560019 GI:21460904
                                                                          12466305
                                                                                                                      cDNA clone set
Genome Res. 12 (12),
                                                                                                                                                                     ,P.R., Stagg,C.A., Bassey,U., Aiba,K., Hamatani,T., Kargul,Luo,A.G., Kelso,J., Hide,W. and Ko,M.S.H.
Assembly, verification, and initial annotation of NIA 7.4K
                                                                                                                                                                                                                                                                                                                                                       Mus musculus
                                                                                                                                                                                                                                             VanBuren, V., Piao, Y., Dudekula, D.B., Qian, Y.,
                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                         (bases 1 to 487)
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                                                                                                                                                                                                                                                                                                                                                                         musculus (house mouse)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    treated with T4 DNA polymerase, and purified by ethanol-precipitation. The cDNAs were ligated to Lone-linker LL-Sal4, purified by phenol/chloroform, and separated from free linkers by Centricon 100. Then, the cDNAs were amplified by long-range high fidelity PCR using Ex Taq polymerase (Takara) with a primer Sal4-S. The products were purified by phenol/chloroform and Centricon 100. The cDNAs were digested with Sal1 and NotI enzymes and cloned into Sal1/NotI site of pSPORT1 plasmid vector. The DH10B E. col1 host was transformed with the ligation mixture by the standard chemical method. The average insert size is about 2.5 kb. The library was constructed by Yulan Plao (NIA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAAGCAATTATAGTGACAATGCTACAGAGGCTTCATATTCTTTTCCCCGTTCCTG
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Pred. No. 9.4e-28;
0; Mismatches 108
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COMMENT

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VERSION KEYWORDS

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RESULT 11
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                                                                     TITLE
                                                                                                         AUTHORS
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                                                                                                                                                                                                                                                   K0283F09-5N NIA Mouse Unfertilized Egg CDNA Library (Long) Mus musculus cDNA clone NIA:K0283F09 IMAGE:30052676 5', mRNA seque: CA561193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           National Institute on Aging/National Institutes of Health 333 Cassell Drive, Suite 3000, Baltimore, MD 21224-6820, USA Email: cdnaelysun.grc.nia.nih.gov
This clone set has been freely distributed to the community. Please visit http://lgsun.grc.nia.nih.gov/cDNA/NIA_7_4k.html for details. Plate: H4061 row: G column: 10
Seq primer: -21M13 Reverse
Contact: Dawood
             Other_ESTs: K0283F09-3
                                 Unpublished
                                                                 Martin, P., Aiba, K., Systematic Analyses
                                                                                      Piao,Y., Kargul,G.J., Dudekula,D.B., Qian,Y., Luo,A., Martin,P., Aiba,K., Tanaka,T. and Ko,M.S.H.
                                                                                                                      Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia; 1 (bases 1 to 518)
                                                                                                                                                                                Mus musculus
                                                                                                                                                                                             Mus musculus (house mouse)
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/note="Vector: pSPORT1; Site_1: Sal1; Site_2: Not1;
clone is among a rearrayed set of 7,407 clones from
than 20 cDNA libraries."
a 123 c 98 g 143 t
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/mol_type="mRNA"
/strain="C57BL/6"
/db_xref="niaEST:H4061G10-5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /dev_stage="mixed"
/lab_host="DH10B"
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71.0%;
                                                                   Tanaka, T. and Ko, M.S.H. of NIA Mouse Unfertiliz
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Sciurognathi; Muridae;
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                                                                   Egg cDNA Library
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                                                                                                                         453 T 453
CA559290
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Plate: K0283 row: F column: 09
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                                                                                                                                                                                                                                                                                                                     CATTTCCTGCGTCTTTTACTTCGACAGAAATCTGACTTGCACTTGGAGACCAGAGAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                     GTGGGCATTCTCTTTCCTCTGCAAATTCAGCCTGGCAGTCCTGCCGACTAAGCCAGAGAA
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                                                                                                                                                                                                                      AACCAATGATACCAGCTACATTGTGACTTTGACTTACTCCTATGGAAAAAGCAATTATAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        treated with T4 DNA polymerase, and purified by ethanol-precipitation. The cDNAs were ligated to Lone-linker LL-Sal4, purified by phenol/chloroform, and separated from free linkers by Centricon 100. Then, the cDNAs were amplified by long-range high fidelity PCR using Ex Tag polymerase (Takara) with a primer Sal4-S. The products were purified by phenol/chloroform and Centricon 100. The cDNAs were digested with SalI and NotI enzymes and cloned into SalI/NotI site of pSPORTI plasmid vector. The DH10B E. coll host was transformed with the ligation mixture by the standard chemical method. The average insert size is about 2.5 kb. The library was constructed by Yulan Plao (NIA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="Vector: psporm1 (Invitrogen); Site_1: Sali; Site_2: noti; Mouse cDNA project by the Laboratory of Genetics, National Institute on Aging (NIA), Intramural Research Program, NIH (http://lgsun.grc.nia.nih.gov/cDNA). This is a long-transcript enriched cDNA library (Ref. Genome Res. 11: 1553-1558 (2001). [PMID: 11544199]). Total RNAs were extracted from a pool of 1488 unfertilized eggs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Double-stranded cDNAs were synthesized with an Oligo(dT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tissue_type="Unfertilized Egg"
/lab_host="DH10B"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone="NIA:K0283F09 IMAGE:30052676".
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71.0%;
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Pred. No. 1.6e-26;
D; Mismatches 70;
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                                                                                                                                                                                                                                Local
  273
                                                191
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Plate: K0256 row: G column: 09
Seq primer: M13 Reverse
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Systematic Analyses of NIA Mouse Unfertilized Egg cDNA Library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 K0256G09-5N NIA Mouse Unfertilized Egg cDNA Library (Long) Mus musculus cDNA clone NIA:K0256G09 IMAGE:30050096 5', mRNA sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Laboratory of Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Dawood B. Dudekula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unpublished
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1 (bases 1 to 523)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
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                                                                                                                                                  AAACATTCTCTCTCCCCAGCCTTCATGTGTTAACCTGGGGATGATGTGGACCTGGGCACT 190
GTGGGCATTCTCTTTCCTCCAAATTCAGCCTGGCAGTCCTGCCGACTAAGCCAGAGAA
                                                                                                 AAACCTTCATGAATAACAGCCTCTGGGTGTGAACGCTGGAATAATGTGGACCTTGGCACT
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                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                 treated with T4 DNA polymerase, and purified by ethanol-precipitation. The cDNAs were ligated to Lone-linker LL-Sal4, purified by phenol/chloroform, and separated from free linkers by Centricon 100. Then, the cDNAs were amplified by long-range high fidelity PCR using Ex Tag polymerase (Takara) with a primer Sal4-S. The products were purified by phenol/chloroform and Centricon 100. The cDNAs were digested with SalI and NotI enzymes and cloned into SalI/NotI site of pSPORTI plasmid vector. The DH10B E. coli host was transformed with the ligation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NotI; Mouse cDNA project by the Laboratory of Genetics, National Institute on Aging (NIA), Intramural Research Program, NIH (http://lgsun.grc.nia.nih.gow/cDNA). This is a long-transcript enriched.cDNA library (Ref. Genome Res. 11: 1553-1558 (2001). [PMID: 1154199]). Total RNAs were extracted from a pool of 1488 unfertilized eggs.

Double-stranded cDNAs were synthesized with an Oligo(dT)
                                                                                                                                                                                                                                                                                                                                                          mixture by the standard chemical method. The average insert size is about 2.5 kb. The library was constructed by Yulan Piao (NIA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone="NIA:K0256G09 IMAGE:30050096"
/tissue_type="Unfertilized Egg"
/lab_host="DH10B"
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                                                                                                                                                                                                     Score 129; DB Pred. No. 1.6e 0; Mismatches
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.6e-26;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bmail: szhao@ttigr.org
Clones are derived from the rat BAC library CHORI-230
Clones are derived from the rat BAC library CHORI-230
(http://www.chori.org/bacpac/rat230.htm). For BAC library
availability, please contact Pieter de Jong (pdejong@mail.cho.org).
Clones may be purchased from BACPAC Resources
Clones may be purchased from BACPAC Resources
(http://www.chori.org/bacpac/or ering_information.htm). BAC end
page: http://www.tigr.org/tdb/bac_ends/rat/bac_end_intro.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The Institute for Genomic Research 9712 Medical Center Dr., Rockville, Tel: 301 838 0200
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BZ147466
BZ147466.1
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,A., Gebregeorgis,E., Overton,L., Russell,D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Shaying Zhao
Department of Eukaryotic Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Other_GSSs: CH230-406E16.TV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rattus norvegicus (Norway rat)
                  AGAAGGCAAGAGGAGCCCCAGTCCTAGAGAAAACACTTGGCTACAACATATGGTACTATC 984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               T 453
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,P. and Fraser,C.M.
                                                                                              Conservative
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                                                                                                                                                                                  /clone_lib="CHORI-230 Segment 2"
/note="Vector: pTARBAC1.3; Site_1: MboI; Site_2: MboI;
CHORI-230 Rat (BN/SSNHSd/MCW) BAC library produced by
Pieter de Jong"
164 c 185 g 202 t
                                                                                                                                                                                                                                                                                                             /organism="Rattus norvegicus"
/mol_type="genomic DNA"
/strain="BN/SSNHsd/MCW"
/db_xxef="taxon:10116"
/clone="CH230-406E16"
                                                                                                                                                                                                                                                                                                /sex="Female"
                                                                                                                                                                                                                                                                               /cell_type="Brain"
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                                                                                                              5.4%;
77.9%;
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                                                                                                              Score 128.6; DB 2
Pred. No. 2.8e-26;
                                                                                              Mismatches
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Best Local
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                                                                                                                               1952
                                                        2012
                                                                                                                                                                                      1892 GGATAAGCTAAACCTGAAGGAGTCTGATGACTCTGTGAACACAGAAGACAGGATCTTAAA 1951
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AGENCOURT_8931844 NIH_MGC_94
5', mRNA sequence.
B0938538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: LLAM13989 row: m column: 06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tissue Procurement: The Cepko Laboratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Robert Strausberg, Ph.D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
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EST.
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                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTTCTGCAAGAATTTTCACAGATGAAGCCAGAACGGGTCAGGAAAACAATTTAGGAGG
                                                                                                                ACCATGTTCCACCCCCAGTGACAAGTTGGTGATTGACAAGTTGGTGGTGAACTTTTGGGAA
                                                                                                                                                                   GTAGAAGTCAAATATGAAGGAGACTGGAAAACTCTGGGGGACACAGAAGACGTGGTCCTAAA
                    TTTTCTGGAAGTAGTTTTGACAGAGGAAGCTGGAAAGGGTCAGGCGAGCATTTTGGGGAG
                                                                                             ACCATGTCCCGTCCCCGCGGATC----TCATTGACAAGCTGGTAGTGAACTTTGAGAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 924)
                                                                                                                                                                                                                                                                                                                                    220
                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                               /note="Organ: eye; Vector: pCMV-SPORT6; Site_1: NotI; Site_2: SalI; Cloned unidirectionally; oligo-dT primed. Average insert size 3.3 kb. Library enriched for full-length clones and constructed by Life Technologies. Note: this is a NIH_MGC Library."

203 c 233 g 268 t
                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue_type="retina"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NIH_MGC_94"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="mRNA"
/db_xref="taxon:10090"
/clone="IMAGE:6466061"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Mus musculus'
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Rodentia;
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Pred. No. 1.3e-25;
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Sciurognathi;
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thi; Muridae; Murinae; Mus
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Best Local Similarity
Matches 128; Conserv
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66 CAGCTGGGAATGTGCATCAGGCAACTCAAGTTTTTCACCACGGCATGTGTCTGTGAATGT 125
                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Clones are derived from the human BAC library RPCI-11. For BAC library availability, please contact Pieter de Jong (pieter@dejong.med.buffalo.edu). Clones may be purchased from BACPAC Resources (http://bacpac.med.buffalo.edu/ordering_bac.htm) or from Resear h Genetics (info@resgen.com). BAC end Web Server: http://www.htsc.washington.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Mahairas GG, Wallace JC, Hood L
High Throughput Sequencing Center
University of Washington
401 Queen Anne Avenue North, Seattle, WA 98109, USA
Tel: (206) 616-3618
Fax: (206) 616-887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     High quality sequence stop: 474.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seq primer: SP6
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       scanning the human genome
Proc. Natl. Acad. Sci. U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 474)
Mahairas,G.G., Wallace,J.C., Smith,K., Swartzell,S., Holzman,T.,
Keller,A., Shaker,R., Furlong,J., Young,J., Zhao,S., Adams,M.D.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AQ815177 .474 bp DNA linear GSS 25-AUG-1999 HS_5265_B2_C06_SP6E RPCI-11 Human Male BAC Library Homo sapiens genomic clone Plate=841 Col=12 Row=F, genomic survey sequence.

AQ815177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence-tagged connectors: A sequence approach to mapping and
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
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                                                              GAGGTGTGTGCAGTATGAAAATTGAGACAGGAAGGCAGAGTGTCAGCTTGTTCCACCT 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTAAAGAAGCCTCGGTTTTAACTGAGGTTGC 919
                                        GACATGTGTGTGCAGTATGATAATTGAGACAGGAAGGCAGAGTGTCAGCCTTGTTCCACCT 131
                                                                                                                                                                                                                                         126
                                                                                                                             Conservative
                                                                                                                                                                                                                                         Ø
                                                                                                                                                                                                                                /Clone_lib="RPCI-11 Human Male BAC Library"
/note="Vector: pBACe3.6; Site_1: EcoRI; Site_2: EcoRI;
Male blood DNA was isolated from one randomly chosen do
and partially digested with a combination of EcoRI and
EcoRI Methylase. Size selected DNA was cloned into the
pBACe3.6 vector at EcoRI sites"

100 c 93 g 152 t 3 others
                                                                                                                                                                                                                                                                                                                                                                                            /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ∕organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                         clone="Plate=841 Col=12 Row=F"
                                                                                                                                                  5.2%;
95.5%;
                                                                                                                             0;
                                                                                                                           Score 125.6; DB 28; Pred. No. 1.6e-25; 0; Mismatches 6;
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                                                                                                                                                                        DB 28;
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                              126 CCGCAAAACATTCT 139
70 CCGCANAACATTGT 57
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1: /ggn2_6/ptodata/1/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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Gapop 10.0 , Gapext 0.
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Copyright (c) 1993 - 2003 Compugen Ltd
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1630.081 Million cell updates/sec
Sequence 4, Appli
Sequence 26, Appli
Sequence 24, Appli
Sequence 4, Appli
Patent No. 5422248
Sequence 6, Appli
Sequence 8, Appli
Sequence 2, Appli
Sequence 5, Appli
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126 PEKPKNLSCIVNEGKKMRCEWDGGRETHLETNFTLKSEWATHKFADCKAKRDTPTSCTVD

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SSTSENRASCSFELPRITIPDNYTIEVEAENGDGVIKS-HMTYWRLENIAKTEPPKIFRV 130

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Query Match 17.4%; Score 67 Best Local Similarity 29.3%; Pred. No Matches 169; Conservative 110; Misma	US-07-797-556-2 US-07-797-556-2 US-07-797-556-2 Sequence 2, Application US/07797556 Patent No. 5562522 GENERAL INFORMATION: Receptor for Oncos TITLE OF INVENTION: Inhibitory Factor INVENTION: INHIBITORY FACTOR NUMBER OF SEQUENCES: 17 CORRESPONDENCE ADDRESS: 1 ADDRESSE: Immunex Corporation STREET: 51 University Street CITY: Seattle STATE: WA COUNTRY: USA ZIP: 98101 COMPUTER READABLE FORM: PC-DOS/MS-DOS SOUTWARE: PI-OPPY disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOUTWARE: PATENTION DATA: APPLICATION NUMBER: US/07/797.556 FILING DATE: 19911122 CLASSIFICATION NUMBER: 32.172 REGISTRATION NUMBER: 32.172 REGISTRATION NUMBER: 2607 TELEFONMUNICATION INFORMATION: TELEFONE: 206-587-0430 INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS: LENGTH: 708 amino acids TYPE: AMINO ACID MOLECULE TYPE: protein US-07-797-556-2	ALIGNMENTS	28
DB 1; Length 7 2e-54; s 258; Indels	tatin M and Leukemia		153A-5 Sec 976-6 Sec 976-6 Sec 1003-2 S
708; 39; Gaps	ົ <u>ລ</u>		Sequence 5, Appl. Sequence 6, Appl. Sequence 2, Appl. Sequence 7, Appl. Sequence 2, Appl. Sequence 2, Appl. Sequence 2, Appl. Sequence 2, Appl. Sequence 6, Appl.
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US-08-308-881-2
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INFORMATION FOR SEQUENCE CHAR!
                                                                                                                                                        APPLICATION NUMBER: US 08/249,553
FILING DATE: 26-MAY-1994
ATTORNEY/AGENT INFORMATION:
NAME: Seese, Kathryn A.
                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Apple 7.1
SOFTWARE: Microsoft Word, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
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APPLICANT: Cosman, David J.
TITLE OF INVENTION: Recepto
                                                                                                TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/0 FILING DATE: 12-SEP-1994 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 51 Unit
                                      TELEPHONE (206) 587-0430
TELEFAX: (206) 233-0644
TELEX: 756822
                                                                                                                  NAME: Seese, Kathryn A.
REGISTRATION NUMBER: 32,172
REFERENCE/DOCKET NUMBER: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
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CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/09058263 Patent No. 5891997 GENERAL INFORMATION:
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Best Local (
                                                                                                                                                                                                                                                 APPLICANT: Mosley, Bruce APPLICANT: Cosman, David J. TITLE OF INVENTION: Recepto NUMBER OF SEQUENCES: 11
                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                      STREET: 51
STREET: 51
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TYPE: ami
TOPOLOGY:
              COMPUTER: Apple Macintosh
OPERATING SYSTEM: Apple 7.1
SOFTWARE: Microsoft Word, Version
                                                                                                                  ZIP:
                                                                                                                                COUNTRY:
                                                                                                                                                                                                            ADDRESSEE:
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                                                                                                                                                                                        E: Immunex Corporation
51 University Street
                                                                                                                                    USA
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%; Pred. No. 1.2e-54;
110; Mismatches 258;
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US-09-059-099-2
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Sequence 2, Application US/09059099 Patent No. 5925740
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SEQUENCE CHARACTERISTICS:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 587-0430
TELEFAX: (206) 233-0644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 26-MAY-1994
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/0 FILING DATE: 12-SEP-1994 APPLICATION NUMBER: US 0
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RIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 29.3%; Pres 169; Conservative 110;
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                                                                                                                                                                                                                                                VENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKT
                                                                                                                                                                                                                                                                                                                      TLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGVPSEGPETK
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                                                                                                                                                                                                                                                                                                                                                                                                                          LVWKTLPPFEANGKILDYEVTLTRWKSHLQNYTVNAT--KLTVNLTNDRYLATLTVRNLV
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                                                                                                                              LTHLCWPTVPNPAESSIATW-----HGDDFKDKL 577
                                                                                                                                                                                             SYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVAYGLKKPNK 548
                                                                                                                                                                                                                             TKKVGKNEAVLEWDQLPVDVQNGFIRNYTIFYRTIGNETAVNVDSSHTEYTLSSLTSDT
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                                                                                               IKKHIWPNVPDPSKSHIAQWSPHTPPRHNFNSKDQM
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32,172
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29.3%;
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Pred. No. 1.2e-54;
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US-09-059-099-2
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Best Local
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TELEX: 756822
INFORMATION FOR SEQ ID NO:
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APPLICATION NUMBER: US/09/059 non FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS LENGTH: 708 amino aci
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TELECOMMUNICATION INFORMATION:
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FILING DATE: 12-SEP-1994
APPLICATION NUMBER: US 01
FILING DATE: 26-MAY-1994
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: NUMBER OF SEQUENCES:
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APPLICANT: Cosman, David J.
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TELEFAX: (206) 233-0644
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                  TLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGVPSEGPETK
                                                                   GKSDAAVLTIPACDFQATHPVMDLKAFPKDNMLWVEWTTPRESVKKYILEWCVLSDKAPC
                                                                                                      GKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWFPDVDSEPT
                                                                                                                                                                                                                                                LQPFTEYVIALRCAVKESK-FWSDWSQEKMGMTEEEAPC-GLELWRVLKPAEADGRRPVR 248
                                                                                                                                                                                                                                                                                                                     KPVLGIKRMIQIEWIKPELAPVSSDLKYTLRFRTVNSTSWMEVNFAKNRKDKNQTYNLTG
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ITDWQQEDGTVHRTYLRGNLAESKCYLITVTPVYADGPGSPESIKAYLKQAPPSKGPTVR
                                                                                                                                         LVWKTLPPFEANGKILDYEVTLTRWKSHLQNYTVNAT--KLTVNLTNDRYLATLTVRNLV
                                                                                                                                                                       LLWKKARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWVSMISYNSL
                                                                                                                                                                                                            LKPFTEYVFRIRCMKEDGKGYWSDWSEEASGITYEDRPSKAPSFWYKIDPSHTQGYRTVQ
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Pred. No. 1.2e-54;
10; Mismatches 258
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US-09-058-264-2
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Patent No. 601
                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 708 amino acid
TYPE: amino acid
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REFERENCE/DOCKET NUMBER: 26
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM: Apple 7.1
SOFTWARE: Microsoft Word, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 26-MAY-1994
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (200, 756822
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: Apple 7
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                                                                                                                                                                                                 Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
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131 KPVLGIKRMIQIEWIKPELAPVSSDLKYTLRFRTVNSTSWMEVNFAKNRKDKNQTYNLTG
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                                  YST-----VYFV-----NIEVWVEAENALGKVTSDHINFDPVYKV-KPNPPHNLSV
                                                                    SSTSENRASCSFFLPRITIPDNYTIEVEAENGDGVIKS-HMTYWRLENIAKTEPPKIFRV 130
                                                                                                        PEKPKNLSCIVNEGKKMRCEWDGGRETHLETNFTLKSEWATHKFADCKAKRDTPTSCTVD
                                                                                                                                         PAKPENISCVYYYRKNLTCTWSPGKETSY-TQYTVK---RTYAFGE---KHD---NCTTN 71
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                                                                                                                                                                                                                                                                                                                                                                                                (206) 233-0644
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29.3%;
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David J.
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Pred. No. 1.2e-54;
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US-09-455-962-2
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 708 amino acid
                                                              REFERENCE/DOCKET NUMBER: 26
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 587-0430
TELEFAX: (206) 233-0644
                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Cosman, David J. TITLE OF INVENTION: Receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 01
STREET: Seattle
                                            TELEFAX: (200
TELEFAX: 756822
                                                                                                                                                                                                                                                                                                                                                  COMPUTER: Apple Macintosh
OPERATING SYSTEM: Apple 7.1
SOFTWARE: Microsoft Word, Version
                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                             FILING DATE: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                         REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Immunex Corporation STREET: 51 University Street
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; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-455-962-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCT-US95-06530-2
                                                                                                                                                                                                                                                                                                                      Sequence 2, Application PC/TUS9506530
GENERAL INFORMATION:
APPLICANT: Mosley, Bruce
APPLICANT: Cosman, David J.
TITLE OF INVENTION: Receptor for Oncostatin
NUMBER OF SEQUENCES: 11
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                    OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1, \
CURRINT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/06:
                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC
                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                        STREET:
CITY: 9
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les 169; Conserv
                                                                                                                                                                           ZIP: 98101
                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                            ADDRESSEE: Immunex Corporation STREET: 51 University Street
FILING DATE:
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                                                              PatentIn Release #1, Version #1.30
                      PCT/US95/06530
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TELEX: 756822

INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 26-MAY-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: (200)
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TOPOLOGY:
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REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 09-SE APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
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amino acid
GY: linear
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IKKHIWPNVPDPSKSHIAQWSPHTPPRHNFNSKDQM
                                     LTHLCWPTVPNPAESSIATW-----HGDDFKDKL 577
                                                                                LYMVRMAAYTDEGGKDGPEFTFTTPKFAQGETEATVVPVCLAFLLTTLLGVLFCFNKRDL
                                                                                                                   SYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVAYGLKKPNK 548
                                                                                                                                                           TKKVGKNEAVLEWDQLPVDVQNGFIRNYTIFYRTIIGNETAVNVDSSHTEYTLSSLTSDT
                                                                                                                                                                                                VENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKT
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US-08-825-558-6
; Sequence 6, Application US/08825558
; Patent No. 5965724
; GENERAL INFORMATION:

APPLICANT:

SHARKEY, ANDREW

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Query Match
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER:
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               SYIVOVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVAYGLKKPNK 548
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                                                      TKKVGKNEAVLEWDQLPVDVQNGFIRNYTIFYRTIIGNETAVNVDSSHTEYTLSSLTSDT
                                                                                         VENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKT 488
                                                                                                                              {\tt ITDWQQEDGTVHRTYLRGNLAESKCYLITVTPVYADGPGSPESIKAYLKQAPPSKGPTGR}
                                                                                                                                                                                                        GKSDAAVLTIPACDFQATHPVMDLKAFPKDNMLWVEWTTPRESVKKYILEWCVLSDKAPC
                                                                                                                                                                                                                                                                                                                                                        {\tt LKPFTEYVFRIRCMKEDGKGYWSDWSEEASGITYEDRPSKAPSFWYKIDPSHTQGYRTVQ}
                                                                                                                                                                                                                                                                                                                                                                                            LQPFTEYVIALRCAVKESK-FWSDWSQEKMGMTEEEAPC-GLELWRVLKPAEADGRRPVR 248
                                                                                                                                                                                                                                                                                                                                                                                                                                   INSEELSSILKLTWTNPSIKSVII-LKYNIQYRTKDASTWSQIP-PEDTASTRSSFTVQD
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1100 NEW YORK AVENUI
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(202)371-2540
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DELLOW, KIMBERLEY A.
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3; Mismatches
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Patent No. 6380160
                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
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APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER FRADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC pDS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: SMITH, STEDHEN K.
APPLICANT: DELLOW, KIMBERLEY A.
TITLE OF INVENTION: Gp130 Lacki
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                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: ESMOND, ROBERT REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
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                                                                                                                                                                                                                                                                               Local Similarity
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                                                          LOPFTEYVIALRCAVKESK-FWSDWSOEKMGMTEEEAPC-GLELWRVLKPAEADGRRPVR 248
                                                                                                                                                                                     SSTSENRASCSFFLPRITIPDNYTIEVEAENGDGVIKS-HMTYWRLENIAKTEPPKIFRV 130
                                                                                                                                                                                                                   PEKPKNLSCIVNEGKKMRCEWDGGRETHLETNFTLKSEWATHKFADCKAKRDTPTSCTVD
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                             LKPFTEYVFRIRCMKEDGKGYWSDWSEEASGITYEDRPSKAPSFWYKIDPSHTQGYRTVQ
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US-09-313-942-9
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                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/313,942 CURRENT FILING DATE: 1999-05-19 PRIOR APPLICATION NUMBER: 09/313,942 PRIOR FILING DATE: 1999-05-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, TITLE OF INVENTION: AND USING FILE REFERENCE: REG 203-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/101,858 PRIOR FILING DATE: 1998-09-25
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LLWKKARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWVSMISYNSL
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                                            LKPFTEYVFRIRCMKEDGKGYWSDWSEEASGITYEDRPSKAPSFWYKIDPSHTQGYRTVQ
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Pred. No. 8.7e-50;
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US-08-419-652-5
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APPLICANT: Chua, Anne O
APPLICANT: Gubler, Ulrich A
TITLE OF INVENTION: INVERLEE
NUMBER OF SEQUENCES: 7
                                                       APPLICATION NUMBER: US 0)
FILING DATE: 19-JUL-1993
ATTORNEY/AGENT INFORMATION:
NAME: Kass, Alan p
REGISTRATION NUMBER: 321
                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
FILING DATE: 31-MAY-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                           SOFTWARE: Patentin Rel CURRENT APPLICATION DATA:
                            TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
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Best Local Sim
Matches 165;
                          Sequence 7, Application US/09313942
Patent No. 6472179
GENERAL INFORMATION:
APPLICANT: REGENERON PHARMACEUTICALS, INC.
TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS,
TITLE OF INVENTION: AND USING
FILE REFERENCE: REG 203-A
CURRENT FILING DATE:
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SEQUENCE CHARACTERISTICS:
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 NUMBER: US/09/313,942
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Pred. No. 8.9e-50;
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US-08-825-558-4
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                                                                                  GENERAL INFORMATION:
APPLICANT: SHARKEY, ANDREW
APPLICANT: DELLOW, KIMBERLEY A.
APPLICANT: DELLOW, KIMBERLEY A.
TITLE OF INVENTION: Gp 130 Lacking
NUMBER OF SEQUENCES: 14
                                                                    CORRESPONDENCE ADDRESS
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ADDRESSEE: STERNE, KE STREET: 1100 NEW YORK

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SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 7
LENGTH: 859
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160; Conserv
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Pred. No. 6.4e-49;
8; Mismatches 242
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RESULT 14
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Sequence 4, Application US/09312611
Patent No. 6380160
GENERAL INFORMATION:
APPLICANT: SHARKEY, ANDREW
APPLICANT: SMITH, STEPHEN K.
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (202)371-254 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: ESMOND, ROBERT W.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER:
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                                                                                                                                                                                                                                                                                   VENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKT 488
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                                                                                                                                                                                                                 SYIVQVMASTSAGGTNGTSINFKT------LSFSVFEIILITS----LIGGGLLI
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Best Local
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MEDIUM TYPE: Floppy disk
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REGISTION NUMBER: 32,893
REFERENCE/DOCKET NUMBER: 06
TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER: US/09/312,611
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CORRESPONDENCE ADDRESS:
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TITLE OF INVENTION: Gp130 Lacking the Transmembrane Domain
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC
OPERATING SYSTEM:
SOFTWARE: Patenti
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Similarity 28.9%;
56; Conservative 10
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LYMVRMAAYTDEGGKDGPEFTFTTPKFELKNTSGLMFQILQRVILPSGHLTLLQGTILI
                                        SYIVQVMASTSAGGTNGTSINFKT-----LSFSVFEIILITS----LIGGGLLI 533
                                                                                   TKKVGKNEAVLEWDQLPVDVQNGFIRNYTIFYRTIIGNETAVNVDSSHTEYTLSSLTSDT 586
                                                                                                                                                                 ITDWQQEDGTVHRTYLRGNLAESKCYLITVTPVYADGPGSPESIKAYLKQAPPSKGPTVR
                                                                                                                                                                                                                                                  GKSDAAVLTIPACDFQATHPVMDLKAFPKDNMLWVEWTTPRESVKKYILEWCVLSDKAPC
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                                                                                                                      VENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKT
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(202)371-2540
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PatentIn Release #1.0,
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104; Mismatches 233;
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CURRENT APPLICATION NUMBER: US/09/313,942
CURRENT FILING DATE: 1999-05-19
PRIOR APPLICATION NUMBER: 09/313,942
PRIOR FILLYG DATE: 1999-05-19
PRIOR APPLICATION NUMBER: 60/101,858
PRIOR FILING DATE: 1998-09-25
NUMBER OF SEQ ID NOS: 32
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 26
LENGTH: 1158
TYPE: PRT
ORGANISM: Homo sapiens
US-09-313-942-26
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Search completed: August 4, 2003, 11:17:05 Job time: 21 secs
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US-09-313-942-26
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TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
TITLE OF INVENTION: AND USING
FILE REFERENCE: REG 203-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15.8%; Score 616; DB 4; Length 1158; Local Similarity 28.6%; Pred. No. 2e-48; Press 158; Conservative 99; Mismatches 770.
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                                                                                      933 KTHTC-PPCPAP 943
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US-09-972-708-14
US-10--006-265-1
US-09-972-708-14
US-10--206-265-2
US-09-982-949-99
US-10-230-163-92
US-10-230-338-92
US-10-230-414-92
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46, Appli
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15, Appl
17, Appl
14, Appl
14, Appli
2, Appli
92, Appli
92, Appli
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US-09-892-949-2

Sequence 2, Application US/09892949 Publication No. US20030096339A1 GENERAL INFORMATION:

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2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546
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-10-232-223-9	-10-230-436-9	-10-227-882-9	-10-227-881-9	-10-227-880-9	-10-219-528-9	0-219-524-9	0-219-474-9	-10-219-470-9	-10-219-072-	-10-233-205-9	-10-219-536-9	-10-219-478-9	0-219-468-9	-10-218-956-9	-10-216-165-9	-10-232-233-9	-10-232-231-9	-10-230-260-9	-10-219-481-9	-10-219-479-9	0-219-466-9	19-464-9	0-219-075-9	-219-003-9	0-230-434-9	0-219-076-9	-10-227-883-9	27-873-	-10-218-849-9
Sequence 92	Sequence 92	٥	9	9	Sequence 92	9	٥	e 9	٥	9	Sequence 92	9	و	е 9	9	9	е 9	9	9	e 9	9	٥	е 9	9	9	е 9	e 9	e 9	Sequence 92
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ALIGNMENTS

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SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 2
LENGTH: 732
                                                                                                                             Query Match 100.0%; Score 3908; Best Local Similarity 100.0%; Pred. No. 0; Matches 732; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/892,949
CURRENT FILING DATE: 2001-06-26
PRIOR APPLICATION NUMBER: US 60/214,282
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: US 60/214,955
PRIOR FILING DATE: 2000-06-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Kuijper, Joseph L.
APPLICANT: Maurer, Mark F.
TITLE OF INVENTION: CYTOKINE RECEPTOR ZCYTOR17
FILE REFERENCE: 00-42
                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/267,963 PRIOR FILING DATE: 2001-08-02
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61 FGEKHDNCTTNSSTSENRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIA 120
                                                              1 MMWTWALWMLPSLCKFSLAALPAKPENISCVYYYRKNLTCTWSPGKETSYTQYTVKRTYA 60
                                         MMWTWALWMLPSLCKFSLAALPAKPENISCVYYYRKNLTCTWSPGKETSYTQYTVKRTYA
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   Query Match
Best Local Similarity
                                                           SEQ ID NO 4
LENGTH: 745
                               TYPE: PRT
ORGANISM: Homo
-09-972-708-4
                                                                           FILE REFERENCE: 3160-B
CURRENT APPLICATION NUMBER: US/09/972,
CURRENT FILING DATE: 2001-10-05
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin version 3.1
                                                                                                                            APPLICANT: Immunex Corporation
APPLICANT: Cosman, David J.
APPLICANT: MOSLEY, Bruce A.
APPLICANT: Mosley, Bruce A.
APPLICANT: Bird, Timothy A.
APPLICANT: DuBose, Robert F.
APPLICANT: Wiley, Steven R.
TITLE OF INVENTION: HEMATOPOIETIN RECEPTORS HPR1
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Pred.
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Sequence 46, Application US/09892949
Publication No. US20030096339A1
GENERAL INFORMATION:
APPLICANT: Sprecher, Cindy A.
APPLICANT: Presnell, Scott R.
APPLICANT: Whitmore, Theodore E.
APPLICANT: Whitmore, Theodore E.
APPLICANT: Whitmore, Toseph L.
APPLICANT: Maurer, Mark F.
TITLE OF INVENTION: CYTOKINE RECEPTOR ZCYTOR17
FILE REFERENCE: 00-42
CURRENT APPLICATION NUMBER: US/09/892,949
CURRENT APPLICATION NUMBER: US 60/214,282
PRIOR APPLICATION NUMBER: US 60/214,282
PRIOR FILING DATE: 2000-66-26
PRIOR APPLICATION NUMBER: US 60/214,955
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RESULT 4
US-09-972-708-15
VSequence 15, Application US/09972708
VSequence 15, Application US/09972708
VSequence 15, Application US20030059871A1
VSEQUENCE INFORMATION:
APPLICANT: IMMODES Corporation
APPLICANT: Cosman, David J.
APPLICANT: Mosley, Bruce A.
APPLICANT: Bird, Timothy A.
APPLICANT: Dibbose, Robert F.
APPLICANT: Wiley, Steven R.
TITLE OF INVENTION: HEMATOPOIETIN RECTORNOONERS
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PRIOR APPLICATION NUMBER: US 60
PRIOR FILING DATE: 2001-08-02
NUMBER OF SEQ ID NOS: 93
SOFTWARE: FastSEQ for Windows V.
SEQ ID NO 46
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Best Local Similarity
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-09-892-949-46
  FILE
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TYPE: PRT
   REFERENCE:
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Pred. No. 5.2
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        Sequence 54, Application US/09892949
Publication No. US/003096339A1
GENERAL INFORMATION:
APPLICANT: Sprecher, Cindy A.
ARPLICANT: Presnell, Scott R.
ARPLICANT: Gao, Zeren
APPLICANT: Whitmore, Theodore E.
APPLICANT: Kuijper, Joseph L.
APPLICANT: Maurer, Mark F.
APPLICANT: Maurer, Mark F.
TITLE OF INVENTION: CYTOKINE RECEPTOR ZC.
FILE REFERENCE: 00-42
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US-09-892-949-54
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CURRENT APPLICATION NUMBER: US/09/892,949
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; ORGANISM: Homo US-09-972-708-15
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CURRENT FILING DATE: 2001-10-05
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin version 3.1
SEQ ID NO 15
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TYPE: PRT
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DKLVIDKLVVNFGNVLQEIFTDEARTGQENNLGGEKNGTRILSSCP
                                                  YGLKKPNKLTHLCWPTVPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPS
                                                                YGLKKPNKLTHLCWPTVPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPS
                                                                                                     LESLKRKTSYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILILITVA
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Pred. No. 5.3
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RESULT 6
US-10-006-265-17
; Sequence 17, Application US/10006265
; Publication No. US20030125520A1
; GENERAL INFORMATION:
; APPLICANT: Maeda, Masatsugu
; APPLICANT: Yaguchi, No. US20030125520A1iko
; TITLE OF INVENTION: NOVEL HEMOPOIETIN RECEPTOR
; FILE REFERENCE: 06501-096001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/214,282
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: US 60/214,955
PRIOR FILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 60/267,963
PRIOR FILING DATE: 2001-08-02
NUMBER OF SEQ ID NOS: 93
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 54
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Pred. No. 5.3e-291;
1; Mismatches 2; I
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RESULT 7
US-09-972-708-14
; Sequence 14, Application U
; Publication No. US20030059
; GENERAL INFORMATION:
; APPLICANT: Immunex Corpor
; APPLICANT: Cosman, David
; APPLICANT: Mosley, Bruce

US20030059871A1

US/09972708

Immunex Corporation Cosman, David J. Mosley, Bruce A.

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; ORGANISM: Homo
US-10-006-265-17
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CURRENT FILING DATE: 2003-01-06
PRIOR APPLICATION NUMBER: PCT/JP00/03556
PRIOR FILING DATE: 2000-06-01
PRIOR APPLICATION NUMBER: JP 11/15797
PRIOR FILING DATE: 1999-06-02
PRIOR APPLICATION NUMBER: JP 11/217797
PRIOR APPLICATION NUMBER: JP 11/217797
PRIOR APPLICATION NUMBER: JP 11/217797
PRIOR FILING DATE: 1999-07-30
NUMBER OF SEO 1D NOS: 40
SOFTWARE: FastSEQ for Windows Version 4.0
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Best Local S
Matches 640
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LENGTH: 662
TYPE: PRT
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99.1%;
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Pred. No. 5.3e-291;
1; Mismatches 2;
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APPLICANT: DuBose, Robert F.
APPLICANT: Wiley, Steven R.
TITLE OF INVENTION: HEMATOPOIETIN RECEPTORS F
FILE REFERENCE: 3160-B
CURRENT APPLICATION NUMBER: US/09/972,708
CURRENT FILING DATE: 2001-10-05
NUMBER OF SEQ ID NOS: 29
SOFTWAKE: Patentin version 3.1
SEQ ID NO 14
LENGTH: 652
TYPE: PRT
ORGANISM: Homo sapiens
US-09-972-708-14

NS-09-972-708-14
; Sequence 2, Application US/10006265; Publication No. US20030125520A1; GENERAL INFORMATION:
; APPLICANT: Maeda, Masatsugu; APPLICANT: Yaguchi, No. US200301255; TITLE OF INVENTION: NOVEL HEMOPOIETI; FILE REFERENCE: 06501-096001
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99.8%;
                      US20030125520A1iko
           HEMOPOIETIN
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Pred. No. 4e-286;
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; LENGTH: 652
; TYPE: PRT
; ORGANISM: Homo :
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PRIOR FILING DATE: 2000-06-01
PRIOR APPLICATION NUMBER: JP 11/155797
PRIOR FILING DATE: 1999-06-02
PRIOR APPLICATION NUMBER: JP 11/217797
PRIOR FILING DATE: 1999-07-30
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 4.0
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Matches
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CURRENT FILING DATE: 2003-01-06
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DKLVIDKLVVNFGNVLQEIFTDEARTGQE
                                                                           PSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYG
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                                       YGLKKPNKLTHLCWPTVPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPS
                                                YGLKKPNKLTHLCWPTVPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPS
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; Sequence 69, Application US/098; Publication No. US20030096339A1; GENERAL INFORMATION: ; APPLICANT: Sprecher, Cindy A.; APPLICANT: Presnell, Scott R.; APPLICANT: Gao, Zeren

: Sprecher, C : Presnell, : Gao, Zeren

RESULT 9 US-09-892-949-69

US/09892949

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RESULT 10
US-10-227-884-92
; Sequence 92, App
; Publication No. I
; GENERAL INFORMAT
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APPLICANT:
APPLICANT:
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CURRENT FILING DATE: 2001-06-26
PRIOR APPLICATION NUMBER: US 60/214,282
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: US 60/214,955
PRIOR FILING DATE: 2000-06-29
PRIOR FILING DATE: 2001-08-02
PRIOR FILING DATE: 2001-08-02
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TYPE: PRT
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SOFTWARE: FastSEQ for Windows Version
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                   Application US/10227884
No. US20030027988A1
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Kuijper, Joseph L.
Maurer, Mark F.
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93.8%;
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PRIOR FILING DATE: 2002-04-09
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/062287
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PRIOR APPLICATION NUMBER: 10/119,480
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OR APPLICATION NUMBER: 60/081819
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OR FILING DATE: 1998-05-06
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OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/085579
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/086392
OR FILING DATE: 1998-05-22
OR FILING DATE: 1998-05-2
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DR FILING DATE: 1997-10-28
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Smith, Victoria
Stephan, Jean-Philippe E
Watanabe, Colin L.
Wood, William I.
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Gerritsen, Mary
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                                                                                       KTEPPKIFRVKPVLGIKRMIQIEWIKPELAPVSSDLKYTLRFRTVNSTSWMEVNFAKNRK
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ADGRRPVRLLWKKARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWV
                       DKNQTYNLTGLQPFTEYVIALRCAVKESKFWSDWSQEKMGMTEEEAPCGLELWRVLKPAE
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FILING DATE: FILING DATE: APPLICATION N

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60/108849 60/108801 60/108787 APPLICATION NUMBER: 60/106905

1998-11-03

APPLICATION APPLICATION PERSONAL PROPERTY OF THE PROPERTY FILING DATE: APPLICATION

NUMBER: NUMBER: NUMBER:

60/106464 60/106248 60/106178 60/101922 60/101916 60/101786

1998-10-29

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APPLICATION NUMBER: 60/ FILING DATE: 1998-09-24

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NUMBER: 60/100919: 1998-09-17 NUMBER: 60/: : 1998-09-18

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60/113605 60/113296

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NUMBER: 60/112422 1998-12-15

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TITLE OF INVENTION: MILLIAM:
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: 395301C96
CURRENT FILING DATE: 2002-08-28
PRIOR APPLICATION NUMBER: US/10/230,163
CURRENT FILING DATE: 2002-04-09
PRIOR FILING DATE: 2002-04-09
PRIOR FILING DATE: 2002-04-09
PRIOR FILING DATE: 2002-04-09
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/062287
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PRIOR APPLICATION NUMBER: 60/063549
PRIOR APPLICATION NUMBER: 60/064103
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-10-31
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Grimaldi, J. Christopher
Gurney, Austin L.
Smith, Victoria
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Wood, William
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R APPLICATION NUMBER: 60/0
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FILING DATE: 1998-12-15
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CURRENT FILING DATE: 2002-08-28
PRIOR APPLICATION NUMBER: 10/119,480
PRIOR FILING DATE: 2002-04-09
PRIOR APPLICATION NUMBER: 60/059113
PRIOR APPLICATION NUMBER: 60/062287
PRIOR APPLICATION NUMBER: 60/062287
PRIOR APPLICATION NUMBER: 60/062287
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-10-17
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                          R APPLICATE: 1997-10-20

DE FILING DATE: 1997-10-31

OR FILING DATE: 1997-10-31

OR APPLICATION NUMBER: 60/06

OR APPLICATION NUMBER: 60/06

THE DATE: 1997-12-17

THE DATE: 1997-12-17
FILING DATE: 1997-12-:
APPLICATION NUMBER: 60
FILING DATE: 1998-03-:
APPLICATION NUMBER: 61
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Smith, Victoria
Stephan, Jean-Philippe I
Watanabe, Colin L.
Wood, William I.
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Goddard, Audrey
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Grimaldi, J. Christopher
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Pred. No. 2.2e
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PRIOR FILING DATE: 1998-03-25
PRIOR APPLICATION NUMBER: 60/079656
PRIOR APPLICATION NUMBER: 60/079728
PRIOR APPLICATION NUMBER: 60/079728
PRIOR FILING DATE: 1998-03-27
Remaining Prior Application data removed - Se
NUMBER OF SEQ ID NOS: 246
SEQ ID NO 92
LENGTH: 582
                                                                                                                                               Sequence 92, Application US/10218631
Publication No. US20030045687A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Benoyers, Luc
APPLICANT: Gerritsen, Marry
APPLICANT: Goddard, Audrey
APPLICANT: Goddwski, Paul J.
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Gurney, Austin L.
APPLICANT: Smith, Victoria
APPLICANT: Stephan, Jean-Philippe F.
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APPLICANT: Watanabe, Colin L.

APPLICANT: Wood, William I.

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLITITE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3530P1C14

CURRENT APPLICATION NUMBER: US/10/218,631

CURRENT FILING DATE: 2002-08-12

PRIOR APPLICATION NUMBER: 10/119,480

PRIOR FILING DATE: 2002-04-09
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Grimaldi, J. Christopher
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Smith, Victoria
Stephan, Jean-Philippe F.
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Wood, William I.
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Pred. No. 2.
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RESULT 14 US-10-230-414-92

GENERAL INFORMATION: Sequence 92, Appropriate Publication No.

Application US/10230414 Vo. US20030050448A1

APPLICANT: Baker, Kevin P.
APPLICANT: Desnoyers, Luc
APPLICANT: Gerritsen, Mar
APPLICANT: Goddard, Audre

Desnoyers, Luc Gerritsen, Mary Goddard, Audrey

Mary

Goddard, Audrey Godowski, Paul

APPLICANT:

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; SEQ ID NO 92
; LENGTH: 582
; TYPE: PRT
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US-10-218-631-92
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Remaining Prior Application d
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OR FILING DATE: 1997-09-17
OR APPLICATION NUMBER: 60/062287
OR FILING DATE: 1997-10-17
OR APPLICATION NUMBER: 60/063549
OR FILING DATE: 1997-10-28
OR APPLICATION NUMBER: 60/064103
OR FILING DATE: 1997-10-31
OR APPLICATION NUMBER: 60/069873
OR APPLICATION NUMBER: 60/0798910
OR APPLICATION NUMBER: 60/079294
OR FILING DATE: 1998-03-25
OR APPLICATION NUMBER: 60/079294
OR FILING DATE: 1998-03-26
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PRIOR PPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/062287
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CURRENT FILING DATE: 2002-08-28
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FILING DATE: 1998-03-20
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                                        PDVDSEPTTLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGV 420
                                                                                                                    SMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWF
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             PSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSI 476
                                                                                                    SMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWF
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Wood, William
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SEQ ID NO 92
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APPLICATION NUMBER: 60/064103
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ADGRRPVRLLWKKARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWV
                                               DKNQTYNLTGLQPFTEYVIALRCAVKESKFWSDWSQEKMGMTEEEAPCGLELWRVLKPAE
                                                                                              KTEPPKIFRVKPVLGIKRMIQIEWIKPELAPVSSDLKYTLRFRTVNSTSWMEVNFAKNRK
                                                                                                               KTEPPKIFRVKPVLGIKRMIQIEWIKPELAPVSSDLKYTLRFRTVNSTSWMEVNFAKNRK 180
                                                                                                                                                            FGEKHDNCTTNSSTSENRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIA
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                                DKNQTYNLTGLQPFTEYVIALRCAVKESKFWSDWSQEKMGMTEEEAPCGLELWRVLKPAE
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Smith, Victoria
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Grimaldi, J. Christopher
Gurney, Austin L.
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Gerritsen, Mary
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No. US20030069397A1
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		453 PSEGPETKVENIGYKTVTITWKEIPKSERKGIICNVTIFYQAEGGKGFCKHAHSEV 508 Search completed: August 4, 2003, 11:21:07	Search completed:
	452	393 PDVDSEPTTLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGV	Db
393	420	361 PDVDSEPTTLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGV	Qy
	392	333 SMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWF	Db
	360		Qy
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Gapop 10.0 , Gapext 0.5
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Copyright (c) 1993 - 2003 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Result

n NR10.3 splic	Human	ABP54363	24		87.1	3405.5	9
zcytor17 pro	Human	ABB05741	23		87.1	3405.5	8
HPR1 variant	Human	AAE24029	23	662	87.1	3405.5	7
haemopoietin	Human	AAB51244	22		87.1	3405.5	6
zcytor17 pro	Human	ABB05738	23		87.1	3405.5	ر ح
haematopoiet	Human	AAE24024	23		99.7	3896	4
NR10.4 splic	Human	ABP54365	24		100.0	3908	ω
n NR10.4 splic	Human	ABP54364	24		100.0	3908	2
zcytor17 pro	. Human	ABB05730	23		100.0	3908	1
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ALIGNMENTS

RESULT 1 ABB05730 FINANCE PRINCE PRODUCE Human zcytor17 protein sequence SEQ ID NO:2. ABB05730 standard; Protein; 01-MAY-2002 ABB05730; (first entry) 732 B

Zcytor17; chromosome 5; 5q11; cytokine receptor; immunomodulatory; antiinflammatory; antiviral; antirheumatic; antiarthritic; cytostatic; muscular; lymphoid; immune; inflammatory; spleenic; blood; bone; autoimmune disease; inflammatory disease; pancreatitis; inflammatory bowel disease infection; immunosuppression; rheumatoid cytotoxicity; leukopenia; Crohn's disease;

Homo sapiens.

WO200200721-A2.

03-JAN-2002.

26-JUN-2000; 2000US-214282P 29-JUN-2000; 2000US-214955P 08-FEB-2001; 2001US-267963P 26-JUN-2001; 2001WO-US20484

(ZYMO) ZYMOGENETICS INC.

Sprecher CA, Presnell SR, Gao Z, Whitmore TE, Kuijper JL;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CC The present invention describes a cytokine receptor designated zcytor17. CC Zcytor17 has immunomodulatory, antiinflammatory, antiviral, cytostatic, CC antirheumatic, antiarthritic and muscular activities. The zcytor17 CC proteins are useful for treating and diagnosing lymphoid, immune, CC inflammatory, spleenic, blood or bone disorders. Agonists or CC anti-zcytor17 antibodies are useful in stimulating cell-mediated cc treatment of infections involving immunosuppression, including certain CC treatment of infections involving immunosuppression, including certain CC viral infections. They are also useful for inducting cytotoxicity and CC for treating leukopenias. Antagonist of zcytor17 polypeptides are useful CC sclerosis), inflammatory diseases (e.g. Crohn's disease), cancer, CC pancreatitis, and inflammatory bowel disease. Zcytor17 was mapped to CC chromosome 5, specifically to the 5q11 chromosomal region. ABA93767 to CC ABA93843 and ABB05730 to ABB05745 represent sequences used in the CC exemplification of the present invention.
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)B; ABA93767.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18; Page 166-168; 235pp; English.
    YGLKKPNKLTHLCWPTVPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPS
                                         Similarity
                                                                                                                                                   SMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWF
                                                                                                                                                                                                                                                                                                                                                                                                                      SMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWNIEWF
                                                                                                                                                                                                                                                          ADGRRPVRLLWKKARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWV
                                                                                                                                                                                                                                                                           ADGRRPVRLLMKKARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNOQLELHLGGESFWV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     encoding a cytokine receptor
diagnosing lymphoid, immune,
disorders -
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Pred. No. 0;
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FGEKHDNCTTNSSTSENRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIA

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RESULT 2
ABP54364
ID ABP5
XX ABP5
XX ABP5
XX NR1C
XX NR1C
KW haen
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XX NA02
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Matches
                                                                                                                                                         Query Match
                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                              The present invention describes haematopoietic receptor NR10 splicing variants (1). (1) have immunomodulator and haemastatic activities. The proteins and encoded genes are applicable in searching for novel haematopoietic factors, and developing remedies for immunological and haematopoietic diseases. The haematopoietin receptor genes participate in in vivo immunomodulation and haematopoietic cell regulation, and in the search for haematopoietic factors capable of functionally binding to the receptors. The present sequence represents the human NR10.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           genes, aprendies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim
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              ^{3}_{3}
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                   ) CHUGAI SEIYAKU
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variants (I). (I) have immunomodulator and haemostatic activities. The proteins and encoded genes are applicable in searching for novel haematopoietic factors, and developing remedies for immunological and haematopoietic diseases. The haematopoietin receptor genes participate in in vivo immunomodulation and haematopoietic cell regulation, and in the search for haematopoietic factors capable of functionally binding to the receptors. The present sequence represents the human NR10.4 protein from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                NR10 splicing variants of hematopoietin receptor proteins and genes, applicable in searching hematopoietic factors and deveremedies for immunological and hematopoietic diseases -
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llarity 100.0%;
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Pred. No. 0;
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neurodegenerative disorder; leukaemia; carcinoma; haematologic disorder;
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                                                                                    /note= "This residue changes
allelic variation"
517
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                                                   /note= "Encoded by Asp during allelic 526..556
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361
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242..515
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139..2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers 20..32
                                                                                                                                                                                                                                                 /note= "This residue changes to allelic variation"
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                                         "Extended transmembrane domain"
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679
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/note= "Box2 conserved
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597..6
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Human and murine hematopoietin receptor polypeptides HPR1 and HPR2, useful for treating cell proliferation, metabolic, and reproductive hormone related conditions $\dot{}$

Claim 1; Page 84-87; 136pp; English

diseases such as cell proliferation, metabolic and reproductive hormone related conditions. They are useful for treating various haematologic and oncologic disorders e.g., Epstein-Barr virus-positive nasopharyngeal carcinoma, myelogenous leukaemia, colon, stomach, prostate, renal cell, cervical and ovarian cancers, lung cancer (SCLC and NSCLC), including cancer-associated cachexia, fatigue, solid tumours (e.g., osteosarcoma, sarcoma), carcinoma (e.g., adenocarcinoma (for example, breast cancer), squamous cell carcinoma), haematologic disorders, anaemias (e.g., anaemia of chronic disease, aplastic anaemia, Fanconi's aplastic anaemia), myelo-dysplastic syndromes (including refractory anaemia, refractory anaemia with ringed sideroblasts or with excess blasts), idopathic thrombocytopaenic purpura (ITP), sickle cell vasocclusive crisis, myelofibrosis/myeloid metaplasia, osteoclast disorders that lead to bone loss such as osteoporosis including post-menopausal osteoporosis, periodontitis resulting in tooth loosening or loss, prosthesis loosening after joint replacement, neurodegenerative conditions (e.g., acute polyneuropathy, Bell's palsy, anorexia nervosa, chronic fatigue syndrome, transmissible dementia including Creutzfeld-Jacob disease, demyelinating neuropathy, Guillain-Barre syndrome, vertebral disc disease, Gulf war syndrome, myasthenia gravis, chronic neuronal degeneration, stroke including treating cell proliferation conditions such as leukaemia and tumour metastasis, osteoporosis resulting from an excess of bone-resorbing cells. HPR sequences are also useful for treating medical conditions and The present invention relates to human and murine haematopoietin receptor polypeptides HPR1 and HPR2. Sequences of the invention are useful for treating cell proliferation conditions e.g., pancytopaenia, leukopaenia, anaemia, thrombocytopaenia, neurodegenerative disorders and osteoporosis resulting from a lack of bone-forming cells. They are also useful for cerebral ischaemic diseases. various other disorders such as HPR1 and HPR2 polypeptides are osteoporosis, transmissible useful

deficient mammary development and

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immunomodulatory;
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Matches 640
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29-JUN-2000;
08-FEB-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes 
Zcytor17 has immunomodulatorv.
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muscular; lymphoid; immune; inflammatory;
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                                                            DKNQTYNLTGLQPFTEYVIALRCAVKESKFWSDWSQEKMGMTEEEAPCGLELWRVLKPAE
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ADGRRPVRLLMKKARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWV
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                                             DKNQTYNLTGLQPFTEYVIALRCAVKESKFWSDWSQEKMGMTEEEAPCGLELWRVLKPAE
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99.1%;
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Pred. No. 8.1e
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                       The present sequence represents a human haemopoietin receptor prot (NR10), specifically designated NR10.3. NR10 occurs as a transment protein and a soluble protein. NR10 is a haemopoietin receptor mol which participates in immunoregulation and haematopoietic cell regulation in vivo, and is useful in searching for haematopoietic factors capable of binding to the receptor. NR10 can be used for the protein can be used for the receptor.
                                                                                                                                                                                                                                                       Hematopoietin receptor protein NR10 for screening treatment of immune and hematopoietic disorders diseases and allergies -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-JUN-1999;
30-JUL-1999;
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.mmunoregulation; haematopoietic cell regulation; transmemb
.mmune disorder; haematopoietic disorder; autoimmune diseas
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                                                 YGLKKPNKLTHLCWPTVPNPAESSIATWHGDDFKDKLNLKESDDSVNTÈDRILKPCSTPS
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pollen allergy.
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Human; haematopoietin receptor; receptor; HPR1; HPR2; cell proliferation pancytopaenia; leukopaenia; anaemia; thrombocytopaenia; osteoporosis; neurodegenerative disorder; leukaemia; carcinoma; haematologic disorder; cancer; myelodysplastic syndrome; idiopathic thrombocytopaenic purpura; ITP; sickle cell vasocclusive crisis; myelofibrosis; myeloid metaplasia; osteoclast disorder; periodontitis; acute polyneuropathy; Bell's palsy; anorexia nervosa; chronic fatigue syndrome; Creutzfeld-Jacob disease; demyelinating neuropathy; Guillain Barre syndrome; Gulf war syndrome; disc disease; myasthenia gravis; cell proliferation degeneration

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                                                                                                                                                                                                                                                                                                                                                                                                              metastasis, osteoporosis resulting from an excess of bone-resorbing cells. HPR sequences are also useful for treating medical conditions and diseases such as cell proliferation, metabolic and reproductive hormone related conditions. They are useful for treating various haematologic and oncologic disorders e.g., Epstein-Barr virus-positive nasopharyngeal carcinoma, myelogenous leukaemia, colon, stomach, prostate, renal cell, cervical and ovarian cancers, lung cancer (SCLC and NSCLC), including cancer-associated cachexia, fatigue, sold tumours (e.g., osteosarcoma, sarcoma), carcinoma (e.g., adenocarcinoma (for example, breast cancer), squamous cell carcinoma), haematologic disorders, anaemias (e.g., anaemia of chronic disease, aplastic anaemia, Fanconi's aplastic anaemia, myelodyplastic syndromes (including refractory anaemia, refractory anaemia with ringed sideroblasts or with excess blasts), idiopathic thrombocytopaenic purpura (ITP), sickle cell vasocclusive crisis, myelofibrosis/
                                                                                                                                                                                                                                                                    as osteoporosis including post-menopausal osteoporosis, periodontitis resulting in tooth loosening or loss, prosthesis loosening after joint replacement, neurodegenerative conditions (e.g., acute polyneuropathy, Bell's palsy, anorexia nervosa, chronic fatigue syndrome, transmissible dementia including Creutzfeld-Jacob disease, demyelinating neuropathy, Guillain-Barre syndrome, vertebral disc disease, Gulf war syndrome, myasthenia gravis, chronic neuronal degeneration, stroke including cerebral ischaemic diseases. HPRI and HPRI polypeptides are also useful for treating manual diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              treating cell proliferation conditions e.g., pancytopaenia, leukopaenia, anaemia, thrombocytopaenia, neurodegenerative disorders and osteoporosis resulting from a lack of bone-forming cells. They are also useful for treating cell proliferation conditions such as leukaemia and tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to human and murine haematopoietin receptor polypeptides HPR1 and HPR2. Sequences of the invention are useful for
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13-OCT-2000;
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ischaemic disease; variant.
                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                            deficient mammary development and infertility: is human HPR1 variant protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 112-115; 136pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-330172/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (IMMV ) IMMUNEX CORP
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                                                                                                                                                                                                                                                        ebral ischaemic diseases. HPR1 and HPR2 polypeptides are also useful treating various other disorders such as osteoporosis, obesity,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and murine hematopoietin receptor polypeptides HPR1 and HPR2, I for treating cell proliferation, metabolic, and reproductive ne related conditions
                                                                                                                              640;
 74
                              61
                                                             14
                                                                                                                                                                                                                                                                                                                                                                                                    metaplasia, osteoclast disorders that lead to bone loss such
                                                                                                                                             Similarity
                                                            MMWTWALMMLPSLCKFSLAALPAKPENISCVYYYRKNLTCTWSPGKETSYTQYTYKRTYA 60
FGEKHDNCTTNSSTSENRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIA
                FGEKHDNCTTNSSTSENRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIA 120
                                                                                                                                                                                            662
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                                                                                                                              Conservative
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2000US-240476P.
2001US-270282P.
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                                                                                                                                             87.1%;
99.1%;
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                                                                                                                           Score 3405.5; DB 2:
Pred. No. 8.3e-280;
1; Mismatches 2;
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RESULT 8
ABB05741
                                                                                                                                                                                                                                                                                                                                                                                                                                              Zcytor17; chromosome 5; 5q11; cytokine receptor; immunomodulatory; antiinflammatory; antiviral; antirheumatic; antiarthritic; cytostamuscular; lymphoid; immune; inflammatory; spleenic; blood; bone;
                                                                                                                                                                                                                                                                                                                                                                                    infection; immunosuppression; cytotoxicity; leukopenia; Crohn's disease; autoimmune disease; rheumatoid arthritis; multiple sclerosis; cancer; inflammatory disease; pancreatitis; inflammatory bowel disease.
WPI; 2002-090519/12
                                      Maurer MF;
                                                           Sprecher CA,
                                                                                                                                                            26-JUN-2000;
29-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABB05741 standard; Protein; 662
                                                                                                                                                                                                                          26-JUN-2001;
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                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
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                                                                                                   ZYMOGENETICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DKLVIDKLVVNFGNVLQEIFTDEARTGQENNLGGEKNG---YVTCP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LESLKRKTSYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DKNQTYNLTGLQPFTEYVIALRCAVKESKFWSDWSQEKMGMTEEEAPCGLELWRVLKPAE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PDVDSEPTTLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGV
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                                                                                                                                       2000US-214282P.
2000US-214955P.
2001US-267963P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                          2001WO-US20484
                                                           Presnell
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Example 1;

present invention

spleenic, blood or bone

polynucleotide

ABA93808

Query Match Best Local Matches 640;

Similarity

Conservative

Sequence

662 AA;

exemplification of

the

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proteins are useful for treating and diagnosing lymphoid, immune, inflammatory, spleenic, blood or bone disorders. Agonists or anti-zcytor17 antibodies are useful in stimulating cell-mediated immunity and for stimulating lymphocyte proliferation, such as in the treatment of infections involving immunosuppression, including certain viral infections. They are also useful for inducting cytotoxicity and for treating leukopenias. Antagonist of zcytor17 polypeptides are useful for treating autoimmune diseases (e.g. croum's disease), cancer, pancreatitis, and inflammatory bowel disease. Zcytor17 was mapped to chromosome 5, specifically to the 5q11 chromosomal region. ABA93767 to ABA93843 and ABB05730 to ABB05745 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zcytor17 has immunomodulatory, antiinflammatory, antiv
antirheumatic, antiarthritic and muscular activities.
                  DKLVIDKLVVNFGNVLQEIFTDEARTGQENNLGGEKNG
                                                                                                                                             LESLKRKTSYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVA
                                                                                                                                                                                                                    PSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYG
                                                                                                                                                                                                                                                                                                                                                                SMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FGEKHDNCTTNSSTSENRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIA 120
                                                      YGLKKPNKLTHLCWPTVPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPS
                                                                            YGLKKPNKLTHLCWPTVPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPS
                                                                                                                                                                                                                                                                                         PDVDSEPTTLSWESVSQATNWT IQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGV
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                                                                                                                           LESLKRKTSYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVA
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                                                                                                                                                                                                 PSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            87.1%;
99.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      describes a cytokine receptor designated zcytor17. dulatory, antiinflammatory, antiviral, cytostatic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              encoding a cytokine diagnosing lymphoid, disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 3405.5; DB 2
Pred. No. 8.3e-280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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                    ---YVTCP
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inflammatory,
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Best I
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                                                                                                                                                                                                                                                                                                                                                                                                                                              variants (I). (I) have immunomodulator and haemostatic activities. The proteins and encoded genes are applicable in searching for novel haematopoietic factors, and developing remedies for immunological and haematopoietic diseases. The haematopoietic receptor genes participate in in vivo immunomodulation and haematopoietic cell regulation, and in the search for haematopoietic factors capable of functionally binding to the receptors. The present sequence represents the human NR10.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NR10 splicing variants of hematopoietin receptor proteins genes, applicable in searching hematopoietic factors and demedies for immunological and hematopoietic diseases
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NR10; splicing variant; haematopoietin receptor; immunomodu haemostatic; haematopoietic factor; immunological disease; haematopoietic cell regulation.
                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                  DKNQTYNLTGLQPFTEYYIALRCAVKESKFWSDWSQEKMGMTEEEAPCGLELWRVLKPAE
                                                                                                        MMWTWALWMLPSLCKFSLAALPAKPENISCVYYYRKNLTCTWSPGKETSYTQYTVKRTYA
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                                 ADGRRPVRLLWKKARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWV
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The present sequence represents a human haemopoietin receptor protein (NR10), specifically designated NR10.1. NR10 occurs as a transmembrane protein and a soluble protein. NR10 is a haemopoietin receptor molecule which participates in immunoregulation and haematopoietic cell regulation in vivo, and is useful in searching for haematopoietic factors capable of binding to the receptor. NR10 can be used for the
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30-JUL-1999;
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                                                                             Claim
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immune disorder; haematopoietic disorder; autoimmumetal allergy; pollen allergy.
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                                                                                                                                                                            Yaguchi
                                                                                                 n receptor protein NR10 for screening potential ligands immune and hematopoietic disorders such as autoimmune allergies -
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and haematopoietic disorders
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           DKLVIDKLVVNFGNVLQEIFTDEARTGQE
                                                 YGLKKPNKLTHLCWPTVPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPS
                                                                                          LESLKRKTSYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVA
                                                                                                                                    PSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYG
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                                        YGLKKPNKLTHLCWPTVPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPS
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No. 4.2e-275;
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RESULT 11
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AAE24028
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 Protein;
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Human

HPR1

variant

protein

entry)

23-SEP-2002

Human; haematopoietin receptor; receptor; HPR1; HPR2; cell proliferation pancytopaenia; leukopaenia; anaemia; thrombocytopaenia; osteoporosis; neurodegenerrative disorder; leukaemia; carcinoma; haematologic disorder; cancer; myelodysplastic syndrome; idiopathic thrombocytopaenic purpura; CTTP; slckle cell vasocclusive crisis; myelofibrosis; myeloid metaplasia; osteoclast disorder; periodontitis; acute polyneuropathy; Bell's palsy; anorexia nervosa; chronic fatique syndrome; Creutzfeld-Jacob disease; demyelinating neuropathy; fatigue syndron Guillain-Barre syndrome; cell proliferation;

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                                                                                                                                                                   cc carcinoma, myelogenous leukaemia, colon, stomach, prostate, renal cell, cc cervical and ovarian cancers, lung cancer (SCLC and NSCLC), including CC cancer-associated cachexia, fatigue, solid tumours (e.g., osteosarcoma, CC sarcoma), carcinoma (e.g., adenocarcinoma (for example, breast cancer), CC squamous cell carcinoma), haematologic disorders, anaemias (e.g., anaemia CC of chronic disease, aplastic anaemia, Fanconi's aplastic anaemia), myelo-CC dysplastic syndromes (including refractory anaemia, refractory anaemia CC myelold metaplasia, osteoclast disorders blasts), idiopathic thrombocyto-CC myelold metaplasia, osteoclast disorders that lead to bone loss such CC as osteoporosis including post-menopausal osteoporosis, periodontitis replacement, neurodegenerative conditions (e.g., acute polyneuropathy, CC Bell's palsy, anorexia nervosa, chronic fatigue syndrome, transmissible dementia including Creutzfeld-Jacob disease, demyelinating neuropathy, CC dislain-Barre syndrome, vertebral disease, Gulf war syndrome, CC myasthenia gravis, chronic neuronal degeneration, stroke including Creutzfeld-Jacob disease, Gulf war syndrome, creating various other disorders such as osteoporosis, obesity, deficient mammary development and infertility. The present sequence cc is human HPR1 variant protein.
                                                                                                                       Query Match
Best Local
                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 polypeptides HPR1 and HPR2. Sequences of the invention are useful for treating cell proliferation conditions e.g., pancytopaenia, leukopaenia, anaemia, thrombocytopaenia, neurodegenerative disorders and osteoporosis resulting from a lack of bone-forming cells. They are also useful for treating cell proliferation conditions such as leukaemia and tumour metastasis, osteoporosis resulting from an excess of bone-resorbing cells. HPR sequences are also useful for treating medical conditions and diseases such as cell proliferation, metabolic and reproductive hormone related conditions. They are useful for treating various haematologic and oncologic disorders e.g., Epstein-Barr virus-positive nasopharyngeal carcinoma, myelogenous leukaemia, colon, stomach, prostate, renal cell, carcinoma and overlagenous leukaemia, colon, stomach, prostate, renal cell,
                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 110-112; 136pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human and murine hematopoietin receptor useful for treating cell proliferation, hormone related conditions -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to human and murine haematopoietin receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200229060-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ischaemic disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 vertebral disc disease; myasthenia gravis; chronic neuronal degeneration;
stroke; fatigue; tumour; sarcoma; osteoporosis; obesity; infertility;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (IMMV ) IMMUNEX CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2002-330172/36
                                                                                                         628;
                 61
                                             14
                                                                                                                       Similarity
                                                           MMMTWALHMLPSLCKESLAALPAKPENISCVYYYRKNLTCTWSPGKETSYTQYTVKRTYA
              FGEKHDNCTTNSSTSENRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIA
                                                                                                                                                                                                 HPR1 variant
                                            MMWTWALWMLPSLCKFSLAALPAKPENISCVYYYRKNLTCTWSPGKETSYTQYTVKRTYA
652
                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mosley
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2000US-240476P.
2001US-270282P.
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                                                                                                                       85.7%;
99.8%;
                                                                                                                                                                                                 protein.
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                                                                                                                       Pred.
                                                                                                                                    Score 3350;
                                                                                                      Mismatches
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                                                                                                      4.2e-275;
ches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polypeptides HPR1 and HPR2, metabolic, and reproductive
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                                                                                                                                    ВВ
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                                                                                                                                 Length
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                                                                                                      Gaps
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RESULT 12
ABP54366
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B
NR10 splicing variants of hematopoietin receptor proteins genes, applicable in searching hematopoietic factors and cremedies for immunological and hematopoietic diseases
                                                                                                                                                                                                                                                            03-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                           Human NR10.5 splicing variant protein SEQ ID NO:8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABP54366;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABP54366 standard;
                                                                                                                                                                                       26-MAR-2001;
                                                                                                                                                                                                                         22-MAR-2002;
                                                                                                                                                                                                                                                                                          WO200277230-A1
                                                                                                                                                                                                                                                                                                                                                                      NR10; splicing variant; haematopoietin receptor; immunomodulator; haemostatic; haematopoietic factor; immunological disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-JAN-2003
                                                                                                                                                    (CHUS)
                                                                                                                                                                                                                                                                                                                                                           haematopoietic
                                                                                  2003-018925/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
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                                                                                                                                                      CHUGAI SEIYAKU
                                                                   ABQ83366
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LESLKRKTSYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVA
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                                                                                                                  Yaguchi N,
                                                                                                                                                                                       2001JP-0087298
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first
                                                                                                                                                                                                                                                                                                                                                             disease;
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ABP54367
ID ABP54
XX ABP54
AC ABP54
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XX AP54
XX AR10;
KW haema
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Matches 574
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
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haematopoietic
                     NR10;
           haemostatic;
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                                                                                                                                                                                                                        453
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                   splicing variant; haematopoietin receptor; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       93
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                                      NR10.6
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                                                                                              standard;
                                                                                                                                                      YGLKKPNKLTHLCWPTVPNPAESSIATWHGDDFK
                                                                                                                                                                                LESLKRKTSYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVA 540
                                                                                                                                                                                                                       PSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYG
                                                                                                                                                                                                                                 PSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYG
                                                                                                                                                                                                                                                                                                           SMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWF 360
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                                                                                                                                              YGLKKPNKLTHLCWPTVPNPAESSIATWHGDDFK
                                                                                                                                                                                                                                                            PDVDSEPTTLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGV
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haematopoietic factor; im
c disease; haematopoietic
                                    splicing
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                                                       entry)
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Pred. No. 1e-251;
                                      protein
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         immunological disease;
                                      SEQ ID
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 regulation.
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                                                                                                                                                                                                                                                                                                                                                                                           93
                                                                                                                                                                                                                                                                                                                                                                                                                         61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MMWTWALWMLPSLCKFSLAALPAKPENISCVYYYRKNLTCTWSPGKETSYTQYTVKRTYA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                       FGEKHDNCTTNSSTSENRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIA 120
               PSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYG
                                                                               PDVDSEPTTLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGV
                                                                                                                                             SMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWF
PSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYG
                                                              PDVDSEPTTLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGV
                                                                                                                           SMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                       MMWTWALWMLPSLCKFSLAALPAKPENISCVYYYRKNLTCTWSPGKETSYTQYTVKRTYA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      581 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 2908; DB 24;
Pred. No. 1.1e-237;
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LESLKRKTSYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVA

24;

Gaps

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180 133 120 73

240

373 360 313 300 253

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RESULT 14
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Query Match
Best Local Similarity
                                                                                                                                                                                                      The present invention describes a cytokine receptor designated zcytor17. Zcytor17 has immunomodulatory, antiinflammatory, antivital, cytostatic, antirheumatic, antiarthritic and muscular activities. The zcytor17 proteins are useful for treating and diagnosing lymphoid, immune, inflammatory, spleenic, blood or bone disorders. Agonists or anti-zcytor17 antibodies are useful in stimulating cell-mediated immunity and for stimulating lymphocyte proliferation, such as in the treatment of infections involving immunosuppression, including certain viral infections. They are also useful for inducting cytotoxicity and for treating autolammune diseases (e.g. rheumatoid arthritis and multiple sclerosis), inflammatory diseases (e.g. Crohn's disease), cancer, chromosome specifically to the fell descence. Zcytor17 was mapped to chromosome specifically to the fell descence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-JUN-2000;
29-JUN-2000;
08-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Isolated polynucleotide encoding a cytokine useful for treating and diagnosing lymphoid, spleenic, blood or bone disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflammatory; antiiviral; antirheumatic; antiarthritic; cytostatic; muscular; lymphoid; immune; inflammatory; spleenic; blood; bone; infection; immunosuppression; cytocoxicity; leukoppenia; Crohn's disease; autoimmune disease; rheumatoid arthritis; multiple sclerosis; cancer;
                                                                                                                                                        chromosome 5, specifically to the 5q11 chromosomal region. ABA93767 to ABA93843 and ABB05730 to ABB05745 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-090519/12.
N-PSDB; ABA93821.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABB05743
                                                                                 Sequence
                                                                                                                                     exemplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 11; Page 221-223;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sprecher
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zcytor17; chromosome 5; 5q11; cytokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               inflammatory disease; pancreatitis; inflammatory bowel disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  zcytor17-fc4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZYMOGENETICS INC.
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                                                                                 764
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; 2000US-214955P.
; 2001US-267963P.
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  71.2%;
93.8%;
                                                                                                                                  present invention.
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  Score
Pred.
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  2783; DB 2
No. 7e-227;
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                        Length 764;
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RESULT 15
ABP54368
ID ABP54
XX ABP54
XX ABP54
XX Humar
XX NR10
DE Humar
XX NR10
CKW haemd
KW haemd
CKW haemd
CX Homo
C
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                        WPI; 2003-018925/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NR10; splicing variant; haematopoietin receptor; immunomodulator; haemostatic; haematopoietic factor; immunological disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABP54368 standard;
                                                                            Maeda M,
                                                                                                                                                                                   26-MAR-2001;
                                                                                                                                                                                                                                       22-MAR-2002;
                                                                                                                                                                                                                                                                                           03-OCT-2002
                                                                                                                                                                                                                                                                                                                                              WO200277230-A1
                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                   haematopoietic disease; haematopoietic cell regulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human NR10.7
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Best Local S
Matches 515
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NR10 splicing variants of hematopoietin receptor proteins and encoded genes, applicable in searching hematopoietic factors and developing remedies for immunological and hematopoietic diseases
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ALIGNMENTS	A54100	S68441	T30581	A43908	A53449	158164	S20901	A40970	A56493	A56178	D54689	TDHULK	C54689	A41070	145971	I38344
S	tumor suppressor p	leptin receptor, s	neural cell adhesi	fibronectin - Afri	plasmacytoma-assoc	BIG-1 protein - ra	titin - rabbit (fr	undulin 1 - human	leucocyte common a	protein-tyrosine-p	protein-tyrosine-p	leukocyte antigen-	protein-tyrosine-p	prolactin receptor	prolactin receptor	titin, cardiac mus

RESULT I49699

C;Superfamily: cytokine receptor homology C;Keywords: glycoprotein F;134-314/Domain: cytokine receptor homology <CRS> R;Salto, M.; Yoshida, K.; Hlbi, M.; Taga, T.; Kishimoto, T.
J. Immunol. 148, 4066-4071, 1992
A;Title: Molecular cloning of a murine IL-6 receptor-associated A;Reference number: 148370; MUID:92291532; PMID:1602143
A;Accession: 14999 δõ 밁 δÃ В Qy В δÃ В Ωy 밁 A;Status: translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-917 <RES>
A;Cross-references: GB:M83336; NID:g193591; PIDN:AAA37723.1; PID:g193592 glycoprotein 130 - mouse C;Species: Mus musculus (house mouse) C;Date: 02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change C;Accession: I49699; I48370 C; Genetics: A; Molecule type: mRNA A; Residues: 1-917 < RE2> A; Gene: A; Status: translated from GB/EMBL/DDBJ A; Accession: I48370 A;Cross-references: EMBL:X62646; NID:g840816; PIDN:CAA44515.1; PID:g840817 Query Match Matches Local Similarity les 204; Conserv 238 126 317 355 257 296 200 140 180 81 22 PAKPENISCVYYYRKNLTCTWSPGKETSY-TQYTVKRTYAFGEKHDNCTTNSSTSENRAS RIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWFPDVDSEPTTLSWESVS PDKPTNLTCIVNEGKNMLCQWDPGRETYLEINYTLKSEWA-TEKFPDCQSKHGT----SEANGKILDYEV--ILTQSKSVSQTYTVTGTELTVNLTNDRYVASLAARNKVGKSAAAVL APVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWVSMISYNSLGKSPVATL RIR-SIKDSGKGYWSDWSEEASGTTYEDRPSRPPSFWYKTNPSHGQEYRSVRLIWKALPL ALRCAVKES--KFWSDWSQEKMGMTEEEAPC-GLELWRVLKPAEADGRRPVRLLWKKARG LKLSWVSSGLGGL-LDLKSDIQYRTKDASTWIQVPL-EDTMSPRTSFTVQDLKPFTEYVF IQIEWIKPELAPVSSDLKYTLRFRTVNSTSWMEVNFAKNRKDKNQTYNLTGLQPFTEYVI CMVSYMPTYYV--NIEVWVEAENALGKVSSESINFDPVDKVKPTPPYNLSVTNSEELSSI CSF-FLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIAKTEPPKIFRVKPVLGIKRM Conservative 130; Mismatches 317; 17.6%; Score 688.5; 26.5%; Pred. No. 1.2 1.2e-41; DB 2; Length 917; Indels 119; signal transducer, Gaps 199 354 295 237 139 179 80 256 24 дp

881

eukocyte antigen

Cultar C cultar C mumber: himinar pe: mRN 1 source nce ext r: cytok r: cyto	RESULT 2 A44257 A44257 Interleukin-6 signal transducing molecule gpl30 - rat C;Species: Rattus norvegicus (Norway rat) C;Date: 30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change 28-Jul-2000 C;Accession: A44257 C;Accession: A44257 R;Wang, Y: Nesbitt, J.E.; Fuentes, N.L.; Fuller, G.M.	QY 673 SRMPEGTRPEAKEQLLFSGQSLVPDHLCEEGAPNPY 708 1 : :	Qy 604 VIDKLVVNFGNVLQEIFTDEARTGQENNLGG	Qy 557 VPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPSDKL 603 : ::	OY 497 STSAGGTNGTSINFKTLSESVFEIILITSLIGGGLLILIILTVAYGLKKPNKLTHLCWPT 556	QY 437 VTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKTSYIVQVMA 496 : : : : :	QY 377 QATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGVPSEGPETKVENIGVKT 436	Db 413 TIPSPHVTAAYSVVNLKAFPKDNLLMVEWTPPPKPVSKYILEWCVLSENAPCVEDWQQED 472
RESULT 3 A36337 membrane glycoprotein gpl30 precursor - human C;Species: Homo sapiens (man) C;Dete: 12-Apr-1991 #sequence_revision 12-Apr-1991 #text_change 28-Jul-2000 C;Accession: A36337 R;Hibi, M.; Murakami, M.; Saito, M.; Hirano, T.; Taga, T.; Kishimoto, T. Cell 63, 1149-1157, 1990 A;Title: Molecular cloning and expression of an IL-6 signal transducer, gpl30. A;Reference number: A36337; MUID:91084844; PMID:2261637 A;Accession: A36337 A;Status: prelininary A;Molecule type: mRNA A;Residues: 1-918 <hba 1-918="" 5911-5911="" 5911-5913="" <crs="" <hba="" a;cross-references:="" a;map="" a;residues:="" c;genetics:="" c;keywords:="" c;superfamily:="" cytokine="" domain:="" f;134-316="" gb:m57230;="" gdb:126725;="" gdb:il6st;="" glycoprotein;="" gpl30="" homology="" membrane="" nid:9186353;="" omim:600694="" pid:9186354="" pidn:aaa59155.1;="" position:="" protein="" receptor=""> Query March Best Local Similarity 28.48; Pred. Mo. 5.5e-41; Matches 175; Conservative 113; Mismatches 261; Indels 67; Gaps 16; Matches 175; Conservative 113; Mismatches 261; Indels 67; Gaps 16; Db 126 PEKPKNLSCIVNECKKNRCENDGGRETHLETNFTLKSEWARTHKFADCKAKRDTPTSCTVD 185 Oy 72 SSTSENRASCSFFLPRITIPDNYTIEVEAENGGDGVKS-HMTYWRLENIAKTEPPKIFRV 130 Db 186 YSTVYFYNIEVWVEAENALGKVTSDHINFDPYKK-KPNPPHNLSV 230</hba>	OY 676 PEGTRPEAKEQLLFSGQSLVPDHLCEEGAPNPYLKNSVTAREFL 719 1	638 GYVTCPFRPDCPLGKSFEELPVSPEIPPRKSQYLRSRM	Qy 557 VPNPAESSIATWHGDDFKDKL-NLKESDDS-VNTEDRILKPCSTPSDKLVID 606 : ::	OY .497 STSAGGTNGTSINFKTLSESVFEIILITSLIGGGLLILIILTVAYGLKKPNKLTHLCWPT 556	QY 437 VTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKTSYIVQVMA 496 :	QY 377 QATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGVPSEGPETKVENIGVKT 436	317 RIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWFPDVDSEPTTLSWESVS	Db 356 SEANGKILDYEVVLTQSKSVSQTYTVNGTELIVNLTNNRYVASLAARNVVGKSPATVL 413

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RESULT
JH0329
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: GB:X55720; NID:g31698; PIDN:CAA39252.1; A;Experimental source: placenta C;Keywords: glycoprotein; transmembrane protein F;1-24/Domain: signal sequence #status predicted <SIG>F;25-783/Product: granulocyte colony-stimulating factor recompositions of the colony-stimulating factor recompositions of th
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A; Accession: JH0329
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C; Species: F
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;Species: Homo sapiens (man);Date: 12-Feb-1993 #sequence_revision;Accession: JH0329; S21608;Larsen, A.; Davis, T.; Curtis, B.M.;Exp. Med. 172, 1559-1570, 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-783/Product: granulocyte colony-stimulating 25-627/Domain: extracellular #status predicted
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                                                                                                                                                                                    PAKPENISCVYYYRKNLT-----CTWSPGKETSY-TQYTVKRTYAFGEKHDNCTTNSST-
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                                  LDCVPKDGQSHCCIPRKHLLLYQNMGIWVQAENALGTSMSPQLCLDPMDVVKLEPPMLRT
                                                                                                                                              PAIPHNLSCL----MNLTTSSLICQWEPGPETHLPTSFTLKSFKSRG-
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26.8%;
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95; Mismatches 2
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C38252
A;Title: Expression cloning of a human granulocyte colony-stimulating A;Reference number: JH0329; MUID:91079757; PMID:2147944 A;Accession: JH0330
                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Reference number: A; Accession: C38252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                granulocyte colony-stimulating factor receptor precursor, long form - human N;Contains: granulocyte colony-stimulating factor, long form; granulocyte c C;Species: Homo sapiens (man)
C;Date: 14-Jun-1991 #sequence_revision 30-Jan-1993 #text_change 05-Nov-1999 C;Accession: C38252; A38252; JH0330; A46486; S68332; S21607 R;Fukunaga, R.; Seto, Y; Mizushina, S.; Nagata, S.; Seto, Y; Mizushina, S.; Nagata, R.; Seto, Y; Mizushina, S.; Nagata, S.; Nagata, R.; Seto, Y; Mizushina, S.; Nagata, S.; Nagata, S.; Proc. Natl. Acad. Sci. U.S.A. 87, 8702-8706, 1990
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                                                                                 R;Larsen, A.; Davis, T.; Curtis, B.M.; Gimpel, J. Exp. Med. 172, 1559-1570, 1990
                                                                                                                                                                                                A; Molecule type: mRNA
A; Residues: 1-680,708-863 <FU2>
                                                                                                                                                                                                                                                                                                         A; Cross-references: GB:MA; Note: clones pHG11 and
                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: mRNA
A; Residues: 1-863 < FUK>
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                                                                                                                                                                   A;Cross-references: GB:M59818; GB:M38025;
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l and pHG5
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                                                                                                                                                                   NID:g183046;
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                                                                                                                                                                      PIDN: AAA63176.1;
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                                                                                                                 J.E.;
                                                                                                              Cosman,
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                                                    factor receptor
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A;Gene: GDB:CSF3R
A;Cross-references: GDB:126430; OMIM:138971
A;Map position: 195-1934.3
C;Keywords: alternative splicing; glycoprotein; transmembrane protein
F;1-24/Domain: signal sequence #status predicted <SIG>F:25-863/Product: granulocyte colony-stimulating factor receptor, long form #status pred:F;25-680,708-863/Product: granulocyte colony-stimulating factor receptor, short form #st F;25-680,708-863/Product: granulocyte colony-stimulating factor receptor, short form #st F;25-680,708-863/Domain: extracellular #status predicted <FMM>F;654-863/Domain: transmembrane #status predicted <INM>F;654-863/Domain: intracellular #status predicted <INM>F;654-863/Domain: intracellular #status predicted <INM>F;654-863/Domain: extracellular #status predicted <INM>F;654-863/Domain: predicted <INM</INM
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A:Residues: 1-680,708-863 <LAR>
A;Residues: 1-680,708-863 <LAR>
A;Cross-references: GB:X55721; NID:g31696; PIDN:CAA39253.1; PID:g31697
A;Note: clone 25-1; placenta
A;Note: clone 25-1; placenta
B;Seto, Y.; Fukunaga, R.; Nagata, S.
J. Immunol. 148, 259-266; 1992
A;Title: Chromosomal gene organization of the human granulocyte colony-stimulating
A;Reference number: A46486; MUID:92091782; PMID:1330796
A;Accession: A46486
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A; Accession: S68332
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A; Residues: 855-863 <SET>
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                                            KGIICNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKTSYIVQVMASTSAGGTNGTSIN
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28.4%; Pred. No. 2e-28;
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MUID:96132662; PMID:8554326
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A:Title: Expression cloning
A:Reference number: A34898;
A:Accession: A34898
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C;Species: Mus musculus (house mouse)
C;Date: 20-Jul-1990 #sequence_revision
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A; Residues: 1-837 < FUK>
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                                   FKDKLNLKESDDSVNTEDRILKPCSTPSDKLVIDKLVVNFGNVLQEIFTDEARTGQENNL
                                                                                                             LITSLIGGGLLILILITVAYGLKKPNKLTHLC - - - - - - - WPTVPNPAESSIATWHGDD
                                                                                                                                                  DAGDHSFSVTLNISLHDFVLKHLEPASLYHVYLMATSRAGSTNSTGLTLRTLDPSDLNIF
                                                                                                                                                                                   AEGGKGFSKTVNSSILQYGLESLKRKTSYIVQVMASTSAGGTNGTSINFKTLSFSVFEII 521
                                                                                                                                                                                                                          GIVGPPVNVYTFAGERAPPHAPALHLKHVGTTWAQLEW--VPEAPRLGMIPLTHYTIFWA
                                                                                                                                                                                                                                                                                                  EAPSILPQGYLIEWEMSSPSYNNSYKSWMIEPNGNITGILLKDNINPFQLYRITVAPLYP
                                                                                                                                                                                                                                                                                                                                                                            VTLVAYNKAGTSSPTTV---VFLEN-----EGPAVTGLHAMAQDLNT IWVDW
                                                                                                                                                                                                                                                                                                                                                                                                               VSMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEW
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TVSVQLFWKP----TPLQEDSGQIQGYLLSWNSPDHQGQDIHLCNTTQLSCIFLLPSEAQN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RRPVRLLWKKARGAPVLE----KTLGYNI-WYYPESNTNLTETMNTTNQQLELHLGGESFW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ELCGLHQAPVYTLQMRC-IRSSLPGFWSPWSPGLQLRPTMKAPTIRLDTWCQKKQLD-PG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NLTGLQPFTEYVIALRCAVKES---KFWSDWSQEKMGMTEEEAP-CGLELWRVLKPAEADG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PVL-----GIKRMIQIEWIKPELAPVSSDLKYTLRFRTVNSTSWMEVNFAKNRKDKNQTY 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AKKRQNNCSIPRKNLLLYQYMAIWVQAENMLGSSESPKLCLDPMDVVKLEPPMLQALDIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PASPSNLSCLMHLTTNSLVCQWEPGPETHLPTSFILK---SFRSRAD-CQYQGDTIPDCV 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FKTLSFSVFEIILITSLIGGGLLILIILTVAYGLKKPNKLTHLCWPTVPNPAESSIATW 568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KSPLTHYTIFWTNAQNQSFSAILNASSRGFVLHGLEPASLYHIHLMAASQAGATNSTVLT
                                                                                                                                                                                                                                                                                                                                     -FPDVDSEPTTLSWESVSQATN-----WTIQ------QDKLKPFWCYNISVYPMLH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PDVVSHQPGCLWLSWKPWKPSEYMEQECELRYQPQLKGAN---WTLVFHLPSSKDQ---F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -SENRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIAKTEPPKI--FRVK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LMTLTPEGSELHIILGLFGLLLLLTCLCGTAWLCCSPNRKNPL-WPSVPDPAHSSLGSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ishizaka-Ikeda,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
----PTIMTEETFQLPSFWDSSVPSITKIT-----ELEEDKKPTHWDSES
                                                                         -GILCLVLLSTTC-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12.1%;
25.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of a receptor MUID:90235283;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          %; Score 471.5; DE
%; Pred. No. 6e-26;
105; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E.; Seto,
                                                                         ----VVTWLCCKRRGKTSFWSDVPDPAHSSLSSWL---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 precursor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for murine granulocyte PMID:2158861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              293;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              147;
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GGEKNGYVTC -

PFRP-DCPLGKSFEELPVSPEIPPRKSQYL

QY 627 GQENNLGGEKNGYVTCPFRPDCPLGKSFEELPVSPEIPPRKSQYLRSRMPE-GTRPEA 683	669	Ov 567 TWHGDDEKDKINIKESDDSVNTEDRIIKDOSTDSDKIVIDKIVVNESNVIDETETDEART 626	QY 510 FKTLSFSVFEIILITSLIGGGLLILIILTVAYGLKKPNKLTHLCWPTVPNPAESSIA 566	Qy 450 KGIICNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKTSYIVQVMASTSAGGTNGTSIN 509 : : : : : : : :	QY 390 PFWCYNISYYPMLHDKVGEPYSIQAYAKEGVPSEGPETKVENIGVKTVTITWKEIPKSER 449	QY 339 DQLVVKWQSSALDVNTWMIEWFPDVDSEPTTLSWESVSQATNWTIQQDKLK 389	QY 284 TTNQQLELHLGGESFWVSMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAE 338	Qy 231 ELWRVLKPAEADGRRPVRLLMKKARGAPVLEKTLGVNIMYYPESNTN-LTETMN 283	QY 173 VNFAKNRKDKNQTYNLTGLQPFTEYVIALRC-AVKESKFWSDWSQEKMGMTEEEAP-CGL 230	QY 130 VKPVLGIKRMIQIEMIKPELAPVSS	QY 75SENRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIAKTEPPKIFR 129 : ::	Qy 22 PAKPENISCVYYYKKNLTCTWSPGKETSY-TQYTVKRTYAFGEKHDNCTTNSST- 74	Query Match 11.3%; Score 443.5; DB 2; Length 771; Best Local Similarity 25.4%; Pred. No. 5.7e-24; Matches 189; Conservative 90; Mismatches 297; Indels 169; Gaps 34;	RESULT 7 B38252 B38252 granulocyte colony-stimulating factor receptor precursor (clone pHQ2) - human (Species: Homo sapiens (man) C. Species: Homo sapiens (man) R. Fukunaga, R.; Seto, Y.; Mizushima, S.; Nagata, S. Proc. Natl. Acad. Sci. U.S.A. 87, 8702-8706, 1990 A. Title: Three different mRNAs encoding human granulocyte colony-stimulating factor rece A; Reference number: A38252; MUID:91062348; PMID:1701053 A; Accession: B38252 A; Status: preliminary A; Molecule type: mRNA A; Residues: 1-771 <fuk> A; Cross-references: GB:M59819; GB:M38026; NID:g485363; PIDN:AAA63177.1; PID:g485364</fuk>	Qy 672 RSRMPEGTRP 681	Db 716 SGNGSLÞALVQAYVLQGDPREISNQSQÞÞSRTGDQVLYGQVLESÞTSÞGVMQYI 769
QY 607 622	Db 875 NPENCKALQFQKSYCEGSSALKTLEMNPC-TPNNVEVLETRSAFPKIEDTE 924	SSQ NDAFOCTATORICATION IN TRACED TO A TRAC	Qy 510 FKTLSFSVFEIILITSLIGGGLLILIILTVAYGLKKPNKLTHLCWPTVP 558	QY 468 FSKTVNSSILQYGLESLKRKTSYIVQVMASTSAGGTNGTSIN 509 : : : : : : : : : : : : : : : : : : : : :	Qy 408 EPYSIQAYAKEGVPSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKG 467	QY 356 MIEWPPDVDSEPTTLSWESV-SQATNWTIQQDKLKPFWCYNISVYPMLHDKVG 407	Qy 299 WVSMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTW 355 : ::: : : : ::: ::: :::	QY 242 DGRRÞVRLLWKKARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESF 298	QY 185 TYNLTGLQPFTEYVIALRCAVKESKFWSDWSQEKMGMTEEEAPC-GLELWRVLKPAEA 241	Qy 134 LGIKRMIQIEWIKPELAPVSSDLKYTLRERTVNSTSWMEVNFAKNRKDKNQ 184 :::	Qy 77 NRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHWTYWRLENIA-KTEPPKIFRVKPV 133 :	QY 22 PAKDENISCVYYYRKNLTCTWSPGKETSYTQYTVKRTYAFGEKHDNCTTNSSTSE 76 :: : : : : : : : : : : : : : : : : :	Query Match 10.5%; Score 408.5; DB 2; Length 1097; Best Local Similarity 21.3%; Pred. No. 3.4e-21; Matches 178; Conservative 139; Mismatches 292; Indels 225; Gaps 40;	RESULT 8 S17308 leukemia inhibitory factor receptor - human C:Species: Homo sapiens (man) C:Species: Homo sapiens (man) C:Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 05-Nov-1999 C:Accession: S17308 R:Gearing, D.P.; Thut, C.J.; VandenBos, T.; Gimpel, S.D.; Delaney, P.B.; King, J.; Pr EMBO J. 10, 2839-2848, 1991 A;Title: Leukemia inhibitory factor receptor is structurally related to the IL-6 sign A; Reference number: S17308; MUID:92007727; PMID:1915266 A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-1097 <gea> A;Cross-references: GB:X61615; NID:g34365; PIDN:CAA43805.1; PID:g34366</gea>	Qy 684 KEQLLESGQS-LVPDHLCEEGAPNP 707	Db 692PLWSRPMCSRGTQ-EQFPPSPNPSLAPAIRSFMGSCWAAPQA 732

Db 328 PDVPQKLSCETHDLKEIICSWNPGRITGLYGPRNTEYTLFESISGKSAVFHRIEGLINET 387 Oy 59 YAFG-EKHDNCTINSSTSENRASCSFFLPRITIPDNYTLEVEAENGDGVIKSHMTYWRLE 117	Query Match 10.4%; Score 405.5; DB 2; Length 1092; Best Local Similarity 21.7%; Pred. No. 5.6e-21; Matches 180; Conservative 131; Mismatches 304; Indels 213; Gaps 36; Qy 22 PAKPENISCVYYYRKNLTCTWSPGKETSYTQYTV	s Lett ltle: ltle: sferen ccessi tatus: blecul ssidue: coss-ri cyword: 43/Dou 1-1092, 28-854,	NID: 9473718; NID: 9441493;	Date: 28- Accession Tomida, M Biochem. Title: Th Reference Accession	RESULT 9 JX0312 differentiation-stimulating factor/leukemia inhibitory factor receptor 1 precursor - mou	Db 925 IISPVAERPEDRSDAEPENHVVVSYCPPIIEEEIPNPAADEAGGTAQVIYIDVQSMYQPQ 984 Qy 623 -EARTGQENN-LGGEKNGYVTCPFRPDCPLGKSFEELPVSPEIPPRKSQYLRSRMPEG 678
e de	Molecule Residues Cross-re Accessic	RESULT 10 PC4184 leptin receptor, Ob-Rb - rat C; Species: Rattus norvegicus (Norway rat) C; Date: 15-Aug-1996 #sequence_revision 13-Mar-1997 #text_change 01-Dec-2000 C; Accession: JC4895; JC4896; JC4897; PC4184; JC4797 R; Takaya, K.; Ogawa, Y.; Isse, N.; Okazaki, T.; Satoh, N.; Masuzaki, H.; Mori, K.; Ta Biochem. Biophys. Res. Commun. 225, 75-83, 1996 A; Title: Molecular cloning of rat leptin receptor isoform complementary DNAs-identifi A; Reference number: JC4895; MUID:96332408; PMID:8769097 A; Accession: JC4895	649PLGKSFEE	Qy 551 HLCWPTVPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPSDKLVIDKL 608 : : : : : : : :	QY 502 GTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVAYGLKKPNKLT 550	Qy 340 QLVVKWQSSALDVNTWMIEWFPDVDSEPTTLSWESV-SQATNWTIQQDKLKPFWCYNISV 398 ::: :

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IL12 receptor component - h
C;Species: Homo sapiens (ma
C;Date: O2-Jul-1996 #sequen
C;Accession: I37892
R;Chua, A.O.; Chizzonite, R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: DDBJ:D84125; NID:g1374707; A;Experimental source: adipose cell C;Comment: This receptor is obese-phenotype-lin C;Genetics: A;Gene: fa C;Keywords: appetite; transmembrane protein F;840-860/Domain: transmembrane #status predict F;861-1162/Domain: intracellular #status predict
                                                                  RESULT
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                                                                                                                      SP---
                                                                                                                                              RPEAKEQLLFSGQSLVPDHLCE-EGAPNPYLKNSVTAREFLVSEKLPEHTKGE
                                                                                                                                                                                                                          TRGSIC-----ISDQCNSANFSGAQSTQGTCEDECQSQPSVKYA--TLVSN----VKTV
                                                                                                                                                                                                                                                   AESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPC-STPSDKLVIDKLVVNFGNVLQEI
                                                                                                                                                                                                                                                                                                     SFSVFEIIL---ITSLIGGGLLI------LIILTVAYGLKK---PNKLTHLCWPTVPNP
                                                                                                                                                                                                                                                                                                                                                     CNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKTSYIVQVMASTSAGGTNGTSINFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                      YLVIEWKNLNDDDG----MKWLRIPSNVNKYYIHDNFIPIEKYQFSLYPVFMEGVGKPKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ITINTGLLKVSWEKPVFP--ENNLQFQIRYGLNGKEIQWKTHEVFDAKSKSASLPVSDL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LGIKR-MIQIEWIKPELAPVSSDLKYTLRFRTVNSTSWMEVNFAKNRKDKNQTYNLTGLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LQTDGFYECVFQP-IFLLSGYTMWIRINHSLGSLDSPPTCVLPDSVVKPLPPS--NVKAE
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                                                                                                                                                                                               FTDEARTGQENNLGGEKNGYVTCPFRPDCPLGKSFEELPVSPEIPPRKSQYLRSRMPEGT
                                                                                                                                                                                                                                                                           ----FEHLFTKHAESVIFGPLLLEPEPVSEEISVDTAWKNKDEMVPAAMVSLLL-TTPDS
                                                                                                                                                                                                                                                                                                                                                                                  INGFTKDDIAKQQNDAGLYVIVPIIISSCVLLLGTLLISHQRMKKLFWDDVPNPKN----
                                                                                                                                                                                                                                                                                                                                                                                                                                                               -WMIEW--FPDVDSEPTTLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NSIGASLVNFNLTFSWPMS--KVNAVQ--SLSAYPLSSSCV----ILSWTLSPNDYSLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ESFWVSMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LWKPLMKNDSLCSVRRYVVKHRTAHNGTWSQDVGNQTNLTFLWAESAHTVTV-----LAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LWK------KARGAPVLEKTLGYNIWYYPESN-TNLT----ETMNTTNQQLELHLGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -CAVYVVQVRCRRLDGLGYWSNWSSPAYTLVMDVKVPMRGPEFWRIMDGDITKKERNVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PFTEYVIALRCAVKES-KFWSDWSQEKMGMT-EEEAPC-GLELWRVLKPAEADGRRPVRL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----SFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIAKTEPPKIFRVKPV
                                                                                                                                                                                                                                                                                                                                                                                                           IQAYAKEGVPSEGPE
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transmembrane #status predicted
: intracellular #status predicted
                         #sequence_revision
                                                                                                                     -QLSFSGL----DELLELEG
                                      (man)
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  R.; Desai,
                                                                                                                                                                      -GAIHSSVSQCIARKHSPLRQSFSS--NSWEIEAQAFFLLSDHPPNVI
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; Pred. No. 4.2e
99; Mismatches
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                                                                                                                                                                                                                                                                                                                               ----QGLNFQKPET
 в.в.;
                         02-Jul-1996 #text_change
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 Truitt,
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A; Title: A no
A; Reference r
A; Accession:
          R:Wang, M.Y.; Zhou, Y.T.; Newgard, C.B.; Unc
FBBS Lett. 392, 87-90, 1996
A;Title: A novel leptin receptor isoform in
A;Reference number: S74225; MUID:96368027; 1
                                                            leptin receptor, isoform Ob-Rf - rat
C:Species: Rattus norvegicus (Norway rat)
C:Date: 29-Jan-1998 #sequence_revision 13
C:Accession: S74225
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J. Immunol. 153, 128-136, 1994
A;Title: Expression cloning of a human IL-12
A;Reference number: 137892; MUID:94267217; PM
A;Accession: 137892
A;Status: preliminary; translated from GB/EMB
A;Status: preliminary;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Cross-references: EMBL: U03187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          174 HRT-PSSPWKLGDCGPQDDDTESCLCPLEMNVAQ-
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                                               ATWHGD------DFKDKLNLKES
                                                                                                                                   SINFKTLSFSVFEIILITSLIGGGLLILIILTVAY-GLKKPNKLTHLCWPTVPNPAESSI
                                                                                                                                                                                CPGVLKEYVVRCRDEDSKQVSEHPVQPTETQVTLSGLRAGVAYTVQVRADTAWLRGVWSQ
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IEFPGGKETWQWINPVDFQEEASLQEA
                                                                                         PQRF-SIEVQVSDWLIFFASLGSFLSILLVGVLGYLGLNRAAR--HLC-PPLPTPCASSA
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21.7%;
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Pred. No. 1.1e-08
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C.B.; Unger,

PMID:8772180

13-Feb-1998 #text_change 05-Nov-1999

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A; Molecule type: mRNA
A; Kesidues: 1-895 <WANY
A; Cross-references: EMBL:U53144; NID:g1395
A; Experimental source: strain Sprague-Dawl
C; Genetics:
A; Gene: rob-R
C; Keywords: appetite; transmembrane #status pr
F; 840-860/Domain: transmembrane #status pr
A;Cross-references: EMBL:U49110; NID:g1195492; PIDN:AAC52424.1; PID:g1195493
A;Experimental source: splice form Re; tissue hypothalamus
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, February 1996
A;Note: this sequence from splice form Re is included to produce a complete sequence
C;Comment: For alternative splice forms, see PIR:S68437, PIR:S68438, PIR:S68439, PIR:
                                                                                                                                                                                                                                                                                                                                 A;Title: Abnormal splicing of the leptin receptor in diabetic mice A;Reference number: S68437; MUID:96231997; PMID:8628397 A;Accession: S68438 A;Status: nucleic acid sequence not shown
                                                                                                                                                                                                                                                                                                                                                                                                                             leptin receptor, splice form Ob-Rb - mouse
C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1998 #sequence_revision 31-Dec-2000 #text_change 31-DeC:Accession: S68438; S68441
R;Lee, G.H.; Proenca, R.; Montez, J.M.; Carroll, K.M.; Darvishzadeh,
Nature 379, 632-635, 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT
S68438
                                                                                                              A; Molecule type: mRNA
A; Residues: 1-796, 'GMCTVLFMD' <LEE2>
                                                                                                                                                                                                     A:Cross-references: EMBL:U49107; NID:g1195486; PIDN:AAC52421.1; PID:g1195487
A:Experimental source: splice form Rb; tissue hypothalamus
A:Note: the nucleotide sequence was submitted to the EMBL Data Library, Febr
A:Note: only a part of the translation is shown
                                                                                                                                                                                                                                                                                              A; Molecule type: mRNA
A; Residues: 664-1162 <LEE1>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KIINGFTKDDIAKQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T--WMIEW--FPDVDSEPTTLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGEP 409
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAVYVVQVRCQRLDGLGYWSNWSSPAYTLVMDVKVPMRGPEFWRIMDGDITKKERNVTLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TINTGLLKVSWEKPVFP--ENNLQFQIRYGLNGKEIQWKTHEVFDAKSKSASLPVSDL--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LLYLVIEWKNLNDDDG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WKPLMKNDSLCSVRRYVVKHRTAHNGTWTQDVGNQTNLT-----FLSGESAHT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----SFELPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIAKTEPPKIFRVKPVL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YSIQAYAKEGVPSE
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24.2%;
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Pred. No.
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                                                                                                                                                       shown;
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                                                                                                                                                         translation
included to produce a complete sequence PIR:S68437, PIR:S68438, PIR:S68439, PIR:S68
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A;Gene: Ob-Rb
C;Keywords: alternative
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                                                                                      VNFGNVLQEIFTDEARTGQENNLGGEKNGYVTCPFRPDC-----PLGKSFEELPVSPEI
                                                                                                                                           PTVPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCS-TPSDKLVI----DKLV
                                                                                                                                                                                                                                                                                                                                                          SPDDYSLLYLVIEW--KILNEDDGMKWLRIPSNVKKFYIHDNFIPIEKYQFSLYPVFMEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NISCETDGYLTKMTCRWSPSTIQSLVGSTVQLRY - - HRRSLYCPDSPSIHPTSEPK - NCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NISC-VYYYRKNLTCTWSPGKETSYTQYTVKRTYAFGEKHDNCTTNSS---TSENRASC-
EAQTFFLLSDQQPTMISP---
                           PPRKSQYLRSRMPEGTRPEAKEQLLFSGQSLVPDHLCE-EGA
                                                                                                                                                                             -----FEHLFTKHAESVIFGPLLLEPEPISEEISVDTAWKNKDEMVPAAMVSLLL
                                                                                                                                                                                                            INFKTLSFSVFEIIL---ITSLIGGGLLI------LIILTVAYGLKK---PNKLTHLCW
                                                                                                                                                                                                                                           XN---
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                                                                                                                                                                                                                                                                                                 VGKPKIINGFTKDAIDKQQNDAGLYVIVPIIISSCVLLLGTLLISHQRMKKLFWDDVPNP
                                                                                                                                                                                                                                                                                                                             VGEPYSIQAYAKEGVPSEGPE----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -CAVYVVQVRCRRLDGLGYWSNWSSPAYTLVMDVKVPMRGPEFWRKMDGDVTKKERNVTL
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                                                                                                                     -TTPDPESSSIC-----ISDQCNSANFSGSQSTQVTCEDECQRQPSVKYATLVSNDKLV
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                                                                                                                                                                                                                                                                                                                                                                                                                   -VTVLAVNSLGASLVNFNLTFSWPMSKVSAVE--SLSAYPLSSSCV-----ILSWTL
                                                                                                                                                                                                                                        -CSWA-----QGLNFQKPET----
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Pred. No. 5.6e-08;
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                                                          ----EEQGFIHSPV-SNCISSNHSPLRQSFSS--SSWET
 -QLSFSGL----DELLELEGS
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C;Accession: 147250 R;Chua, A.O.; Chizzonite, R.; Desai, B.B., Accession 2, Chizzonite, R.; Desai, B.B., Accession 2, 128-136, 1994 J. Immunol. 153, 128-136, 1994 A;Title: Expression cloning of a human IL-12 receptor component. A;Title: The symmetric in 137892; MUID:94267217; PMID:7911493

A; Status: preliminary;

translated

from GB/EMBL/DDBJ

IL-12 receptor beta component precursor C; Species: Mus musculus (house mouse) C; Date: 02-Jul-1996 #sequence_revision 02-C; Accession: 149295

02-Jul-1996

#text_change

05-Nov-1999

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new member Minetti,

of.

mouse

RESULT I49295

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RESULT 15
$68440
Leptin receptor, splice form Ob-Rd - mouse
C;Species: Mus muscullus (house mouse)
C;Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 31-Dec-2000
C;Accession: $68440
R;Lee, G.H.; Proenca, R.; Montez, J.M.; Carroll, K.M.; Darvishzadeh, J.G.; Nature 379, 632-635, 1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DPAKMVTHSWSSKP-----TLEQEE-----CYRITVFASKNPKNPMLWATVLSSYYFGGN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ENRASCSFF------LPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIAKTE 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAKPENISCVYYYRKNLTCTW---SPGKETSYTQYTVKRTYAFGEKHDNC---TINSSTS
                                                                                                                                                                                                                                                                                                                                                         --FPEVLYPRDALVVE-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ASRAGTPR----HVSVRNQTGDSVSVEWTASQLSTCPGVLTQYVVRCEAEDGAWESEWLVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A-KEGVPSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSK-TVN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VDSEPTTLSWESVSQATNWTIQQDKLKPFWCYNISVY-----PMLHDKVGEPYSIQAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWFP--
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWVSMISYNSLGKSPVATLRIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        M-PVCVPPEVLP-QAKIKFLVEPLNQGGRRRLTMQGQSPQLAVPEGCRGRPGAQVKKHLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QEKMGMTEEEAPCGLELWRVLKPAEADGRR-----PVRLLWKKARGAP------V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WTLGDCGPQVNSGSGVLGDICGSMSESCLCPSENMAQEIQIRRRRRLSSGAPGGPWSDWS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QTYNLTGLQPFT-EYVIALRC-AVKESKF-------
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QER--CRYFSSGPDRTVQFWEQDGIPVLSKVNFWVESRLGNRTMKSQKISQYLYNWTKTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PLGPRNLSCYRVSKTDYECSWQYDGPEDNVSHVLWC------CFVPPNHTHTG
                                                                                                                                                                                                                          HVTLPLLLGGVTQGASVLDDLWRTHKTAE
                                                                                                                                                                                                                                                        ----PYLKNSVTAREFLVSEKLPEHTKGE
                                                                                                                                                                                                                                                                                          GDGTESPQAAPECA --
                                                                                                                                                                                                                                                                                                                      GKSFEELPVSPEIPPRKSQYLRSRMPEGTRPEAKEQLLFSGQSLVPDHLCEEGAPN----
                                                                                                                                                                                                                                                                                                                                                                                    RILKPCSTPSDKLVIDKLVVNFGNVLQEIFTDEARTGQENNLGGEKNGYVTCPFRPDCPL
                                                                                                                                                                                                                                                                                                                                                                                                                    SVLLVGSLGYIGLNR--AAWHLC-PPLPTPCGSTAVEFPGSQG-----KQAWQWCNPED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PTKTQVTLDGLRSRVMYKVQVRADTAR--LPGAWSHPQRFSFEVQISRLSIIFASLGSFA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SSILQYGLESLKRKTSYIVQVMASTSAGGTNGTSINFKTLSFSV--FEIILITSLIGGGL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AQELTETRALNV---SVGGNMTSMQWAAQA-PGTTYCLEWQPWFQHRNHTHCTLIVPEEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative 113;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ----SCRCQAQTSKTVPLGKKLNLSGATYDLNVLAKTRFGRSTIQKWHLP
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Pred. No. 3.3e-08;
                                                                                                                                                                                                                                                                                          LDTRRPLETQRQRQVQALSEARRL - - - GLAREDCPRGDLA
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                                                                              J.I.;
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A;Title: Abnormal splicing of the leptin receptor in diabetic mice. A;Reference number: $68437; MUID:96231997; PMID:8628397 A;Accession: $68440 A;Accession: $68440 A;Status: nucleic acid sequence not shown; translation not shown A;Molecule type: mRNA A;Residues: 1-900 <LEE>
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C;Keywords: alternative splicing; appetite; transmembrane
F;840-860/Domain: transmembrane #status predicted <TMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: EMBL:049109; NID:gl195490; PIDN:AAC52423.1; PID:gl195491 A;Experimental source: tissue hypothalamus
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, February C;Comment: For alternative splice forms, see PIR:S68437, PIR:S68438, PIR:S68439,
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IISSCVLLLGTLLISH---
                                LIGGGLLILITLTVAYGLKKPNKLTHLCWPTVPNPAESSIATWHGDDFKDKLNLKE
                                                                                                                                                                                                                   SPDDYSLLYLVIEW--KILNEDDGMKWLRIPSNVKKFYIHDNFIPIEKYQFSLYPVFMEG
                                                                                                                                                                                                                                                                                                                                                                 LWKPLTKNDSLCSVRRYVVKHRTAHNGTWSEDVGNRTNLTFLWTEPAHT:
                                                                                                                                                                                                                                                                                                                                                                                      LWK-----KARGAPVLEKTLGYNIWYYPESN-TNL----TETMNTTNQQLELHLGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LGIKR-MIQIEWIKPELAPVSSDLKYTLRFRTVNSTSWMEVNFAKNRKDKNQTYNLTGLQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NISC-VYYYRKNLTCTWSPGKETSYTQYTVKRTYAFGEKHDNCTTNSS---TSENRASC-
                                                                                                                                                                             VGEPYSIQAYAKEGVPSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGG
                                                                                                                                                                                                                                                     SALDVNT---WMIEWFPDVDSEPTTLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDK
                                                                                                                                                                                                                                                                                         ----VTVLAVNSLGASLVNFNLTFSWPMSKVSAVE--SLSAYPLSSSCV-----ILSWTL
                                                                                                                                                                                                                                                                                                                                                                                                                                       -CAVYVVQVRCRRLDGLGYWSNWSSPAYTLVMDVKVPMRGPEFWRKMDGDVTKKERNVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PFTEYVIALRCAVKES-KFWSDWSQEKMGMT-EEEAPC-GLELWRVLKPAEADGRRPVRL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LQRDGFYECVFQP-IFLLSGYTMWIRINHSLGSLDSPPTCVLPDSVVKPLPPS--NVKAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----SFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIAKTEPPKIFRVKPV
                                                                                                         KGFSKTVNSSILQYGLESLKRKTSYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITS
                                                                                                                                                                                                                                                                                                                           ESFWVSMISYNSLGKSPV-----ATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ITVNTGLLKVSWEKPVFP--ENNLQFQIRYGLSGKEIQWKTHEVFDAKSKSASLLVSDL-
                                                                                                                                           VGKPKIINGFTKDAIDKQ----
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Pred No. 1e-07;
-QRMKKLFWDDVPNPKNCSWA--QGLNFQKDISLHE
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Search completed: August 4, 2003, 11:26:06 Job time: 51 secs

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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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Perfect score:
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        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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679.5
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      Gapext 0
                      PRLR_MOUSE
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CA1C_RABIT
PRLR_BOVIN
CA1C_HUMAN
PTPF_HUMAN
PTPD_HUMAN
FINC_XENLA
DCC_HUMAN
FINC_HUMAN
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1323.983 Million cell updates/sec
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45	44	43	42	41	40	39	38	37	36	35	34
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4.0	4.1	4.1	4.1	. 4.1	4.1	4.2	4.2	4.2	4.3	4.3	4.3
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I131_MOUSE	FINC_BOVIN	FINC_PLEWA	LAR_CAEEL	TENA_HUMAN	DSCA_HUMAN	NEO1_RAT	NEO1_HUMAN	DCC_MOUSE	LAR_DROME	PTPJ_MOUSE	CA1C_NOTVI
		Q91289 pleurodeles									Q91145 notophthalm

ALIGNMENTS

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000000000000000000000000000000000000000	88888888	8888888888	RR	RESULT IL6B_M ID - I ID
the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch). EMBL; X62646; CAA44515.1; EMBL; X62646; CAA44515.1; EMBL; M83336; AAA37723.1; PIR; 149699; 149699. HSSP; P40189; 1BOU. MGC; MGC:96566; Ilist. GO: GO:0007165; P:signal transduction; IDA. InterPro; IPR002996; CRIA.	-i- DEVELOPMENTAL STAGE: IN EMBRYONIC STEM CELLS IT IS FOUND FROM DAY 6 OF GESTATION. IT REACHES A PEAK ON DAY 8 AND GRADUALLY DECLINES DURING THE REST OF EMBRYOGENESISi- SIMILARITY: Contains 1 immunoglobulin-like C2-type domaini- SIMILARITY: Contains 5 fibronectin type III domainsi- SIMILARITY: BELONGS TO THE CYTOKINE FAMILY OF RECEPTORSi- SIMILARITY: BELONGS TO THE CYTOKINE FAMILY OF RECEPTORS.	RESULTING IN THE FORMATION OF HIGH-AFFINITY IL-6 BINDING AND TRANSDUCES THE SIGNAL. DOES NOT BIND IL-6. MAY HAVE A EMBRYONIC DEVELOPMENT. - SUBUNIT: Heterodimer of an alpha and a beta chain. - SUBCELLULAR LOCATION: Type I membrane protein. - TISSUE SPECIFICITY: FOUND IN TISSUES SUCH AS BRAIN, HEART SPLEEN, KIDNEY, LUNG AND LIVER. FOUND IN ALL THE CELL LINE EXCEPT BAF-B03. EXPRESSION NOT RESTRICTED TO IL-6-RESPONS CELLS.	[1] SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. STRAIN-ICR; TISSUE-Macrophage; MEDLINE-92291532; PubMed-1602143; Saito M., Yoshida K., Hibi M., Taga T., Kishimoto T.; Saito M., Yoshida K., Hibi M., Taga T., Kishimoto T.; Molecular cloning of a murine IL-6 receptor-associated signal transducer, 9p130, and its regulated expression in vivo."; J. Immunol. 148:4066-4071(1992). J. Immunol. 148:4066-4071(1992). J. TROUCTION: SIGNAL-TRANSDUCING MOLECULE. THE RECEPTOR SYSTEMS FOR IL-6, LIF, OSM, CNTF, AND IL-11 CAN UTILIZE GP130 FOR INTTIATING SIGNAL TRANSMISSION. BINDS TO IL-6/IL-6-R (ALPHA CHAIN) COMPLEX,	RESULT 1 II.6B_MOUSE STANDARD; PRT; 917 AA. II.6B_MOUSE STANDARD; PRT; 917 AA. AC Q00560; DT 01-FEB-1995 (Rel. 31, Created) DT 01-FEB-1995 (Rel. 31, Last sequence update) DT 16-OCT-2001 (Rel. 40, Last annotation update) DE Interleukin-6 receptor beta chain precursor (IL-6R-beta) (Interleukin DE 6 signal transducer) (Membrane glycoprotein 130) (GP130). GN II.6ST. GN II.6ST. OS Mus musculus (Mouse). OS Mus musculus (Mouse). DE 6 signal transducer) (Chordata; Craniata; Vertebrata; Euteleostomi; OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. OX NCBL TAXID=10090;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                 TIPSPHVTAAYSVVNLKAFPKDNLLWVEWTPPPKPVSKYILEWCVLSENAPCVEDWQQED
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STSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVAYGLKKPNKLTHLCWPT
                                                  AVLAWDQIPVDDQNGFIRNYSISYRTSVGKEMVVHVDSSHTEYTLSSLSSDTLYMVRMAA
                                                                     VTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKTSYIVQVMA
                                                                                                                                                                                                                                                                                                                                           ALRCAVKES--KFWSDWSQEKMGMTEEEAPC-GLELWRVLKPAEADGRRPVRLLWKKARG
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                                                                                                                   ATVNRTHLRGRLLESKCYQITVTPVFATGPGGSESLKAYLKQAAPARGPTVRTKKVGKNE
                                                                                                                                                  QATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGVPSEGPETKVENIGVKT
                                                                                                                                                                                                                    RIPAIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWFPDVDSEPTTLSWESVS
                                                                                                                                                                                                                                                     SEANGKILDYEV--ILTQSKSVSQTYTVTGTELTVNLTNDRYVASLAARNKVGKSAAAVL
                                                                                                                                                                                                                                                                                     APVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWVSMISYNSLGKSPVATL
                                                                                                                                                                                                                                                                                                                        RIR-SIKDSGKGYWSDWSEEASGTTYEDRPSRPPSFWYKTNPSHGQEYRSVRLIWKALPL
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IPR003529;
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CYTOPLASMIC (POTENTIAL)
IG-LIKE C2-TYPE.
FIBRONECTIN TYPE-III 1
FIBRONECTIN TYPE-III 2
FIBRONECTIN TYPE-III 3
FIBRONECTIN TYPE-III 3
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Pred. No. 1.6e
30; Mismatches
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P40190;
P01-FEB-1995 (Rel. 31, Created)
01-FEB-1995 (Rel. 31, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Interleukin-6 receptor beta chain precursor (
                                                                                                                                                                            EMBL; M92340; ; NOT PIR; A44257; A44257 HSSP; P40189; 1BQU.
                                                                                                                                                                                                                                                                                  entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                           the
                                                                                                                                                                                                                                                                                                                                                                                                                                            This
                          PROSITE;
                                                SMART; SM00060; FN3;
                                                                              Pfam; PF00041;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          transducing molecule, gp130.";
Genomics 14:666-672(1992).
-!- FUNCTION: SIGNAL-TRANSDUCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=93052397; PubMed=1427893; Wang Y., Nesbitt J.E., Fuentes N.L., F
                                                                                                                                                                                                                                                                                                                                                                                                                   between
                                                                                                InterPro; IPR002996; CR1A.
InterPro; IPR003961; FN_III
InterPro; IPR003529; Hemtopo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-Liver;
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Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FUNCTION: SIGNAL-TRANSDUCING MOLECULE. THE RECEPTOR SYSTEMS FOR IL-6, LIF, OSM, CNTF, AND IL-11 CAN UTILIZE GP130 FOR INITIATING SIGNAL TRANSMISSION. BINDS TO IL-6/IL-6-R (ALPHA CHAIN) COMPLEX, RESULTING IN THE FORMATION OF HIGH-AFFINITY IL-6 BINDING SITES, AND TRANSDUCES THE SIGNAL DOES NOT BIND IL-6. MAY HAVE A ROLE IN EMBRYONIC DEVELOPMENT (BY SIMILARITY).

SUBCULTURAR ICCATION: Type I membrane protein.

TISSUE SPECIFICITY: FOUND IN HEPATOCYTES, ASTROCYTES, FIBROBLASTS AND ENDOTHELIAL CELLS.
                                                                                                                                                                                                                                                                                                                                                                                s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIMILARITY: Contains 1 immunoglobulin-like C2-type domais SIMILARITY: Contains 5 fibronectin type III domains. SIMILARITY: BELONGS TO THE CYTOKINE FAMILY OF RECEPTORS
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oa; Chordata;
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                        HEMATOPO_REC_L_F2;
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Glycoprotein;
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                                                                  VTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKTSYIVQVMA
                                                                                       GTVNRTHLRGSLLESKCYLITVTPVFPGGPGSPESMKAYLKQAAPSKGPTVRTKKVGKNE
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                        YTEEGGKDGPEFTFTTLKFAQGEIEAIVVPVCLAFLLTTLLGVLFCFNKRDLIKKHIWPN
                                                       AVLEWDHLPVDVQNGFIRNYSISYRTSVGKEMVVRVDSSHTEYTLSSLSSDTLYMVHMAA
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FIBRONECTIN TYPE-III
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J. Clin. Invest
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P40189; Q9U
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01-FEB-1995 (Rel. 31, Created)
01-FEB-1995 (Rel. 31, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Interleukin-6 receptor beta chain precursor (
6 signal transducer) (Membrane glycoprotein 1
                                                                                                 EMBO
                                                                                                                                                                                                                                                                                                                                                                                                   gp130
                                                                                                                                                                                                                                                                                                            MEDLINE-20341529; PubMed=10880057;
Tanaka M., Kishimura M., Ozaki S.,
Murakami M., Nakao K.;
                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=91084844; PubMed=2261637;
Hibi M., Murakami M., Saito M., F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota;
                                                                                                                                   MEDLINE=98169383; PubMed=9501088; Bravo J., Staunton D., Heath J.K.,
                                                                                                                                                                                                                                      PARTIAL SEQUENCE, MEDLINE=21269388;
                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                      "Crystal
                                                                                                                                                          X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS)
                                                                                                                                                                                   Moritz R.L., Hall N.E., Connolly L.M., Sim
"Determination of the disulfide structure
the extracellular domain of the human sign
J. Biol. Chem. 276:8244-8253(2001).
                                                                                                                                                                                                                                                                                                                                                                                                             "Molecular cloning
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE=M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   receptor)
       ystal structure of a cytokine-binding region of gp130.";
OJ. 17:1665-1674(1998).
FUNCTION: Signal-transducing molecule. The receptor systems for III-6, LIF. OSM, CNTF, IL-11 AND CT-1 can utilize gp130 for initiating signal transmission. Binds to IL-6/IL-6F (alpha chain) complex, resulting in the formation of high-affinity IL-6 binding sites, and transduces the signal Does not bind IL-6. May have a role in embryonic development (By similarity).
SUBURIT: Heterodimer of an alpha and a beta chain.
SUBCELULAR LOCATION: Type I membrane protein (isoform 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens (Human
ryota; Metazoa;
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                                                                                                                                                                                                                                                              M., Nakao K.;
of novel soluble gp130 and detection bodies in rheumatoid arthritis.";
Invest. 106:137-144(2000).
                                                                                                                                                                                                                                                                                                                                                                FROM
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Catarrhini;
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130) (GP130)
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transducer,
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                                                                                                                                                                                                                                                                                                                  TRANSMEM
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                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS01353; HEMATO Receptor; Transmembrane;
                                                                                                                                                                                                                                                                                                                                                                                                               SMART; SM00060; FN3;
                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam; PF00041;
                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR002996; CR1A.
InterPro; IPR003961; FN_III.
InterPro; IPR003529; Hemtopoptn_L_F2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GO;
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                                                                                                                                                                                                                                                                                                                                 DOMAIN
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- TISSUE SPECIFICITY: Found in all the tissues and cell lines examined. Expression not restricted to IL-6 responsive cells.
DISEASE: Isoform 2 is an autoantigen found in rheumatoid arthritis (RA) but it is not specific to patients with RA.
SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
SIMILARITY: Contains 5 fibronectin type III domains.
SIMILARITY: BELONGS TO THE CYTOKINE FAMILY OF RECEPTORS.
DATABASE: NAME=PROW; NOTE=CD guide CD130 entry;
WWW="http://www.ncbi.nlm.nlm.gov/prow/cd/cd130.htm".
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GO:000588; C:integral to plasma membrane; TAS.
GO:0004898; F:gpl30; TAS.
GO:0004924; F:oncostatin-M receptor activity; TAS.
GO:0004872; F:receptor activity; TAS.
GO:0004872; F:receptor activity; TAS.
GO:0007166; P:cell surface receptor linked signal transdu.
GO:0007165; P:immune response; TAS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A36337: A36337.

; 1BQU; 26-AUG-98.

; 1BJB; 13-JAN-99.

; 1I1R; 28-MAR-01.

ew; HGNC:6021; IL6ST.
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me=2; Synonyms=GP130-RAPS;
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  AAA59155.1; -.
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mbrane; Glycoprotein; Immure; Alternative splicing.
  splicing; Named isoforms=2;
                                                                                                                                                                                                                  INTERLEUKIN-6 RECEPTOR BETA CHAIN.
EXTRACELLULAR (POTENTIAL).
POTENTIAL.
CYTOPLASMIC (POTENTIAL).
IG-LIKE C2-TYPE.
FIBRONECTIN TYPE-III 1.
FIBRONECTIN TYPE-III 2.
FIBRONECTIN TYPE-III 3.
FIBRONECTIN TYPE-III 5.
FIBRONECTIN TYPE-III 5.
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                         SYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVAYGLKKPNK
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                                                                     GKSDAAVLTIPACDFQATHPVMDLKAFPKDNMLWVEWTTPRESVKKYILEWCVLSDKAPC
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918
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28.48;
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Pred. No. 7.7e
13; Mismatches
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Missing (in isoform
/FTId=VSP_001685.
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RESULT 4
GCSR_HUMA
GCSR_HUMA
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DT 01-FEB
DT 01-FEB
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DE (CD114
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OS EUKary
OC MCB1_7
RN FISUI
RN GSQUE
RC TISSUI
RN FEWLUN
RT recep
RT recep
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01-FEB-1995
15-SEP-2003
                   MEDLINE-94/4/1, Schelen a..., Dong F., Hoefsloot L.H., Schelen a..., Verman A.J., Tow I.P., Lowenberg B.; Veerman A.J., Tow I.P., Lowenberg B.; "Identification of a nonsense mutation in the granulocyte-colony-stimulating factor receptor in severe congenital neutropenia."; stimulating factor receptor in severe congenital neutropenia."; ""+1 Acad. Sci. U.S.A. 91:4480-4484(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A., AND VARIANTS THR-231; ASN-320; ARG-
GLN-440; HIS-510; HIS-562 AND CYS-036
Rieder M.J., Armel T.Z., Carrington D.P., Ozuna M., Kulo
Rajkumar N., Toth E.J., Yi Q., Nickerson D.A.;
Submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases
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Q99062;
                                                                                                                                                                                                                                                                                                   MEDLINE=92007729; PubMed=1717255;
Fukunaga R., Ishizaka-Ikeda E., Pan C.
"Functional domains of the granulocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Chromosomal gene organization of the stimulating factor receptor.";
J. Immunol. 148:259-266(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Three different mRNAs factor receptor.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=91062348; PubMed=1701053;
Fukunaga R., Seto Y., Mizushima S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        receptor: a structural mosaic of immunoglobulin, and fibronectin d. J. Exp. Med. 172:1559-1570(1990).
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Mammalia; Eutheria; Primates;
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    STRUCTURE BY NMR MEDLINE=97331327;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seto Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=92091782;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Expression cloning of a human granulocyte colony-stimulating factor
receptor: a structural mosaic of hematopoietin receptor,
immunoglobulin, and fibronectin domains.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Park L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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., Davis T., Curtis B.M., Gimpel
Sorensen E., March C.J., Smith (
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    PubMed=9187659
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annotation update)
ting factor receptor precursor (G-CSF-R)
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Layton J.E., Iaria J., Smith D.K., Treutlein H.R.;
"Identification of a ligand-binding site on the granulocyte
stimulating factor receptor by molecular modeling and mutage
J. Biol. Chem. 272:29735-29741(1997),
1- FUNCTION: RECEPTOR FOR GRANULOCYTE COLONY-STIMULATING FA
CSF). IN ADDITION IT MAY FUNCTION IN SOME ADHESION OR RE
EYENTS AT THE CELL SURFACE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nat.
[8]
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motif of the granulocyte colony-stimulating
interaction with ligand.";
Nat. Struct. Biol. 4:498-503(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Name=4; Synonyms=GCSFR-4, D7;
ISOId=099062-4; Sequence=VSP_001671, VSP_001672;
ISOId=099062-4; Sequence=VSP_001671, VSP_001672;
ISOId=099062-4; Sequence=VSP_001671, VSP_001672;
ITSSUE SPECIFICITY: ONE OR SEVERAL FORMS HAVE BEEN FOUND IN MYELOGENOUS LEUKEMIA CELL LINE KG-1, LEUKEMIA U937 CELL LINE, IN BONE MARROW CELLS, PLACENTA, AND PERIPHERAL BLOOD GRANULOCYTES.
THE GCSER-2 FORM HAS BEEN FOUND ONLY IN LEUKEMIA U937 CELLS. THE GCSER-3 FORM IS HIGHLY EXPRESSED IN PLACENTA.

-!- DISEASE: Defects in CSF3R might be a cause of severe congenital neutropenia (SCN) in some patients.
-!- SIMILARITY: Contains 5 fibronectin type III domains.
-!- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
-!- SIMILARITY: BELONGS TO THE CYTOKINE FAMILY OF RECEPTORS.
                                                                                                                                                                                                                                                                                                                                                                                          use by non-profit institutions as long modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN the European Bioinformatics Institute. There are no resti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3D-STRUCTURE MODELING OF 125-331. MEDLINE=98037802; PubMed=9368043;
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                                                                                                                                                                                                                                                                                                                                                                            entities requires a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUBUNIT: DIMER (PROBABLE).
SUBCELLULAR LOCATION: TYPE I MEMBRANE WHICH LACKS THE TRANSMEMBRANE DOMAIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DATABASE: NAME=PROW; NOTE=CD guide CD114 entry; WWW="http://www.ncbi.nlm.nih.gov/prow/cd/cd114.htm".
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Event=Alternative splicing; Named isoforms=4;
Comment=Additional isoforms seem to exist. Experimental
confirmation may be lacking for some isoforms;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Name=3; Synonyms=GCSFR-3;
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ame=2; Synonyms=GCSFR-2;
IsoId=Q99062-2; Sequence=VSP_001674;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THE RECEPTOR
                                                                                                                                                                                                                                                                                                                                                           s requires a license agreement (S an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synonyms=GCSFR-1;
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of an extracellular domain containing
                                                                                                                                                                                                                                                                                                                                                                           (See http://www.isb-sib
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PIR; B38252; B38252. PIR; C38252; C38252. PIR; JH0329; JH0329. PDB; 1AZ7; 28-JAN-98. EMBL; EMBL; EMBL; EMBL; EMBL; MIM: 1389/1; -.

GO: GO:0005887; C:integral to plasma membrane;
GO; GO:0004872; F:receptor activity; TAS.

GO; GO:0006952; P:defense response; TAS. InterPro; IPR002996; CR1A.
InterPro; IPR003961; FN_III.
InterPro; IPR003529; Hemtopoptn_L_F2 Genew; X55721; CAA39253.1; -. X55720; CAA39252.1; -. S71484; AAB20660.1; -. M59818; AAA63176.1; -. M59819; AAA63177.1; -. M59820; AAA63178.1; -. w; HGNC:2439; CSF3R 138971; -. M59820; AAA63178.1; AY148100; AAN05790

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Cell adhesion; Receptor; Repeat; Signal; Transmembrane;
Immunoglobulin domain; Glycoprotein; Alternative splicing;
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KKPVPWSSHNSSETGGLFTLVQTYVLQGDPRAVSTQPQSQS
GTSDQVLYGQLLGSFTSPGFGHYLRCDSTQPLLAGLTPSPK
SYENLWFQASPLGTLVTPAPSQEDDCVFGPLLARPLLQGIR
VHGMEALGSF -> APTGRIPSQCVSQTQLTAAMAPGCPQS
WRRMPSSCPALLARHPSPSSQCWRRMKRSRCPGSPITAQRPV
ASPLWSRPMCSRGTQEQFPSPMSLAPAIRSFMSCWAAP
QAQGQGTISAVTPLSPSWRASPPAPSPMRTSGSRPAPWGFW
                                                                            Score 517.5;
Pred. No. 1.6e
01; Mismatches
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CYTOPLASMIC (POTENTIAL IG-LIKE C2-TYPE. III-LIBRONECTIN TYPE-III 1 FIBRONECTIN TYPE-III 2 FIBRONECTIN TYPE-III 3 FIBRONECTIN TYPE-III 4 FIBRONECTIN TYPE-III 4 FIBRONECTIN TYPE-III 5 FIBRONECTIN TYPE-III 5 FIBRONECTIN TYPE-III 6 FIBRONECTIN TYPE-III 6 FIBRONECTIN TYPE-III 7 FIBRONECTIN TYPE-III 7 FIBRONECTIN TYPE-III 8 FIBRONECTIN TYPE-III 9 FIBRONECTIN 
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Y -> H
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EXTRACELLULAR
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SEQUENCE FROM N.A.
MEDLINE-90235283; PubMed-2158861;
Fukunaga R., Ishizaka-Ikeda E., Seto Y., Na
"Expression cloning of a receptor for murir
stimulating factor";
Cell 61:341-350(1990).
[2]
STRUCTURE BY NMR OF 225-333.
                                                                                                                                                                                                    Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                           p40223;
01-FEB-1995 (Rel. 31, Created)
01-FEB-1995 (Rel. 31, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Granulocyte colony stimulating factor receptor
CSF3R OR CSFGR.
                                                                                                                                                                                         NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                           GCSR_MOUSE
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                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
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Sciurognathi; Muridae;
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                                                                                                                                                                                                                                                                                  CHAIN
                                                                                                                                                                                                                                                                                            SIGNAL
                                                                                                                                                                                                                                                                                                            Cell adhesion; Receptor;
                                                                                                                                                                                                                                                                                                                             Pfam; PF00041; fn3; 3. SMART; SM00060; FN3; 2.
                                                                                                                                                                                                                                                                                                                                             MGD; MGI:1339755; Csf3r.
GO; GO:0030593; P:neutrophil chemotaxis;
InterPro; IPR002996; CRIA.
InterPro; IPR003961; FM_III.
InterPro; IPR003529; Hemtopoptn_L_F2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           interaction with ligand.";
Nat. Struct. Biol. 4:498-504(1997).
                                                                        CARBOHYD
                                                                                                                                                                                                                                                                DOMAIN
                                                                                                                                                                                                                                                                                                                   PROSITE; PS01353; HEMATOPO_REC_L_F2;
                                                                                                                                                                                                                                       DOMAIN
                                                                                                                                                                                                                                                                                                    Immunoglobulin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THE CELL SURFACE.
SUBUNIT: DIMER (PROBABLE).
SUBCELLULAR LOCATION: Type I membrane protein.
SUBCELLULAR LOCATION: Type I membrane protein.
TISSUE SPECIFICITY: FOUND IN BONE MARROW.
SIMILARITY: Contains 1 immunoglobulin-like C2-type domain SIMILARITY: Contains 5 fibronectin type III domains.
SIMILARITY: BELONGS TO THE CYTOKINE FAMILY OF RECEPTORS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FUNCTION: RECEPTOR FOR GRANULOCYTE COLONY-STIMULATING FACTOR. IN ADDITION IT MAY FUNCTION IN SOME ADHESION OR RECOGNITION EVENTS \hat{i}
                                                                                                                                                                                                                                                                                                                                                                                                   1GCF;
1CTO;
1CD9;
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22-OCT-97.
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 A34898
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Glycoprotein;
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POTENTIAL.

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"TBRONECTIN TYPE-III 3.

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                                                                                                                                                                                                                                                                                                            Signal; Transmembrane;
                                                                                                                                                                                                                                                                                                  3D-structure.
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P42702;
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Homo sapiens (Human).
Eukaryota; Metazoa; (
Mammalia; Eutheria; F
NCBI_TaxID=9606;
                                                                                               1995 (Rel. 32, 1995 (Rel. 32, 1995 (Rel. 41, 2003 (Rel. 41, 1 inhibitory fa
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -FPDVDSEPTTLSWESVSQATN-----WTIQ------QDKLKPFWCYNISVYPMLH
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                    (Human).
---aroa; Chordata;
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                                                                                               factor
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; Pred. No. 5.3e
105; Mismatches
                                                                                                 receptor
                                                                                                                   sequence update)
annotation update)
                    Craniata; Vertebrata; Catarrhini; Hominidae;
                                                                                                                                                                                                  PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                       the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed. entities requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                           InterPro; IPR003529; Hemtopoptn_L_F2
Pfam; PF00041; fn3; 4.
SMART; SM00060; FN3; 5.
                                                                                                                                                                                                                                                                                                                                                                         MIM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-92007727; PubMed-1915266;
Gearing D.P., Thut C.J., Vandenbos T., Gimpel S.D., E King J., Price V., Cosman D., Beckmann M.P.;
"Leukemia inhibitory factor receptor is structurally
                                                                                                                                                                                                                                                                                                                     GO; GO:0005887; C:integral to plasma membrane; TAS.
GO; GO:0004923; F:leukemia inhibitory factor receptor activity;
GO; GO:0007166; P:cell surface receptor linked signal transdu.
InterPro; IPR002996; CR1A.
InterPro; IPR003961; FN_III.
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                                                                                                                      CARBOHYD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FUNCTION: SIGNAL TRANSDUCING MOLECULE, MAY HAVE A COMMON PATHY WITH GP130. THE SOLUBLE FORM INHEBITS THE BIOLOGICAL ACTIVITY LIF BY BLOCKING ITS BINDING TO RECEPTORS ON TARGET CELLS. SUBUNIT: HETERODIMER COMPOSED OF LIFR AND GP130. SUBCELLULAR LOCATION: TYPE I MEMBRANE PROTEIN. THERE IS A MEMBRANE BOUND AND A SECRETED FORM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Note=NO experimental confirmation available;
SIMILARITY: Contains 4 fibronectin type III domains.
SIMILARITY: BELONGS TO THE CYTOKINE FAMILY OF RECEPTORS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Name=2; Synonyms=Secreted;
IsoId=P42702-2; Sequence=Not described
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IsoId=P42702-1; Sequence=Displayed;
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sequence update) annotation updat receptor precursor

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                                                                                                                                                                                                                          PAKPENISCVYYYRKNLTCTWSPGKETSY----TQYTVKRTYAFGEKHDNCTTNSSTSE
                        TRPEAKEQLLFSGQSLVPD------HLCEEGAPNPYLKNSVTAREFLVSEK
                                                 AKPEEEQENDPVGGA--GY-----KPQMHLPINSTVEDIAAEEDLD
                                                                          -EARTGQENN-LGGEKNGYVTCPFRPD--CPLGKSFEELPVSPEIPPRKSQYLRSRMPEG
                                                                                                      IISPVAERPEDRSDAEPENHVVVSYCPPIIEEEIPNPAADEAGGTAQVIYIDVQSMYQPQ
                                                                                                                                                         NPENCKALQF - - - - -
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21.3%;
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DISULFID CARBOHYD
                        TRANSMEM
DOMAIN
                                                                                                                                                                                     EMBL; $73496; AAC60698.1; --
EMBL; $73495; AAC60697.1; --
EMBL; D26177; BAA05165.1; --
EMBL; D17444; BAA04258.1; --
PIR; JX0312; JX0312.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tomida M., Yamamoto-Yamaguchi Y., Hozu
"Three different cDNAs encoding mouse
J. Biochem. 115:557-562(1994).
                                                                                                                                                                                                                                                                                                                               This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Leukemia inhibitory factor receptor is structurally related to IL-6 signal transducer, gpl30."; EMBO J. 10:2839-2848(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. (ISOFORM 2).
MEDLINE=92007727; PubMed=1915266;
Gearing D.P., Thut C.J., Vandenbos T.,
King J., Price Y., Cosman D., Beckmann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10090;
                                                                                                                  SMART; SM00060; FN3; 4
                                                                                                                                                                                                                                                         entities requires a license agreement (See http://www.isb-sib.ch/announce, or send an email to license@isb-sib.ch).
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"Pregnancy associated increase in 
receptor in mouse liver.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=94039833; PubMed=7901054;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                          CHAIN
                                                                                                        PROSITE;
                                                                                                                                        MGD; MGI:96788; Lifr.
InterPro; IPR003996; CRIA.
InterPro; IPR003561; FN_III.
InterPro; IPR003529; Hemtopoptn_L_F2.
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                                                DOMAIN
                                                                                             Receptor;
                                                                                                                                                                                                                                                                                                                                                                                     Isoid-P42703-2; Sequence-VSP_001686, VSP_001687; Note-No experimental confirmation available; TISSUE SPECIFICITY: PLACENTA, LIVER, KIDNEY, HEART AND EMBRYOS. THE LIVER MAY BE THE PRIMARY SITE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FUNCTION: SIGNAL-TRANSDUCING MOLECULE. MAY HAVE A COMMON PATHWAY WITH GP130. THE SOLUBLE FORM INHIBITS THE BIOLOGICAL ACTIVITY OF LIF BY BLOCKING ITS BINDING TO RECEPTORS ON TARGET CELLS.
                                                                                                                                                                                                                                                                                                                                                  SIMILARITY: Contains 4 fibronectin type III domains. SIMILARITY: BELONGS TO THE CYTOKINE FAMILY OF RECEPTORS
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                                                                                                                                                                                                                                                                                                        European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEMBRANE-BOUND AND A SECRETED ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                      Name=2; Synonyms=Secreted;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Name=1; Synonyms=Membrane;
IsoId=P42703-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Event=Alternative splicing; Named isoforms=2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lett. 334:193-197(1993).
                                                                                                                                                                                                                                                                                                                SWISS-PROT entry is copyright. It is produ-
sen the Swiss Institute of Bioinformatics
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                                                                                            Transmembrane;
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                                                                                                        HEMATOPO_REC_L_F2;
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Rodentia;
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EXTRACELLULAR (POTENTIAL).
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CYTOPLASMIC (POTENTIAL).
BY SIMILARITY.
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Sciurognathi; Muridae; Murinae;
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             VPKIEDT--EIISPVAERPGERSEVDPENHVVVSYCPPIIEEEITNPAADEVGGASQVVY
                                  VVNFGNVLQEIFTDEA-RTGQENNLGGEKNGYVT-CP----FRPDC---;-----
                                                                                                                            GTNGTSINFKTLSFSVFEIILITSLIGGGLLILILITVAYGL-----
                                                                                                                                                    FYFQKGERDTPKTRSLEPHHSDIKLKNITDISQKTLR--IADLQGKTSYHLVLRAYTHGG
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                                                                                                                                                                                                                                                                                           FDPQHRAEIQLSKNDYIISVVARNSAGSSPPSKIASMEIPN-----DDITVEQAVGLGN
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                                                          ETFYPDIPNPENCKALQF
                                                                               HLCWPTVPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPSDKLVID--KL
                                                                                                       LGPEKSMFVVTKENSV
                                                                                                                                                                          FYQAEGGKGFSKT---
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"A functional interleukin 12 receptor complex is con beta-type cytokine receptor subunits.";
Proc. Natl. Acad. Sci. U.S.A. 93:14002-14007(1996).
-!- FUNCTION: INVOLVED IN IL-12 TRANSDUCTION. BINDS
                                                                                                                                                                                                                                                    SIGNAL
                                                                                                                                                                                                                                                                                                   Pfam; PF00041; fn3; 4
SMART; SM00060; FN3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Inf-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Interleukin-12 receptor beta-2 chain precursor
                                                                                                                                                                                                                                                                                                                                InterPro; IPR003529; Hemtopoptn_L_F2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          s SWISS-PROT entry is copyright. It is produced through a collab ween the Swiss Institute of Bloinformatics and the EMBL outst European Bloinformatics Institute. There are no restrictions by non-profit institutions as long as its content is in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUBCELLULAR LOCATION: Type I membrane protein. SIMILARITY: BELONGS TO THE CLASS II CYTOKINE FAMILY SIMILARITY: Contains 4 fibronectin type III domains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUBUNIT: DISULFIDE-LINKED HOMODIMER/OLIGOMER. AFFINITY IL-12 RECEPTOR IS COMPOSED OF AT LEA
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                                                                                                                                                                                                                                                                                    PS01353;
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                                                                                                                                                                                                                                                                                                                                                 IPR002996; CR1A.
IPR003961; FN_III
                                                                                                                                                                                                                                                                   Transmembrane;
                                                                                                                                                                                                                                                                                                                                                                                                                                  email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                   HEMATOPO_REC_L_F2; 1.
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H., Minetti L.J.,
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Rodentia;
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OR 23 (PC
                                                                                                CYTOPLASMIC
FIBRONECTIN
FIBRONECTIN
FIBRONECTIN
FIBRONECTIN
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POTENTIAL.
                                                                                                                                                                                                                                   OR 23 (POTENTIAL)
INTERLEUKIN-12 RE
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Sciurognathi; Muridae;
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                                                                                                                                                                                                                                                                   Signal;
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;; Murinae; Mus
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188; Conser
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                                                                                                                                                                                                                                                  GNVLQEIF-----
                                                                                                                                                                                                                                                                                 RTIPDPANS---TW----VKKYPILEEKIQLPT-DNLLMAWPTPEEPEPLIIHEVLYHM
                                                                                                                                                                                                                                                                                                                                                                                                               LHYRIYWKERDSTAQPELCEIQYRRSQNS----HPISSLQPRVTYVLWMTAVTAAGESPQ
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   STANDARD;
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5; Mismatches
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Pred. No. 2
   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FPDVDSEPTTLSWESVSQATNWTIQQDKLKPFWC
                                                                                                                                                                                                                                                 -----TDEARTGQENNLGGEKNGYVTCPF
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   862
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504

568

393

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Q99665;
16-OCT-2001 (Rel. 4
16-OCT-2001 (Rel. 4
28-FEB-2003 (Rel. 4
Interleukin-12 rece
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DOMAIN
CARBOHYD
CARBOHYD
                                                                                                            CARBOHYD
CARBOHYD
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DOMAIN
                                                                                                                                                                                                                                                                Receptor;
SIGNAL
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"A functional interleukin 12 receptor"
                                                                                                                                                                                                                                                                                                   Interpro; IPR002996; CR1A.
Interpro; IPR003961; FN_II
Interpro; IPR003529; Hemto
Pfam; PF00041; fn3; 3.
SMART; SM00060; FN3; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; U64198; AAB36675.1;
HSSP; P40189; 1BQU.
Genew; HGNC:5972; IL12RB2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Entropean Bioinformatics Institute. There are no restricted by non-profit institutions as long as its content
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     beta-type cytokine receptor subunits.";
Proc. Natl. Acad. Sci. U.S.A. 93:14002-14007(1996).
-!- FUNCTION: INVOLVED IN IL-12 TRANSDUCTION. BINDS
                                                                                                                                                                                                                                                                                                                                                               GO; GO:0005887; C:integral to plasma membrane; TAS.
GO; GO:0004907; F:interleukin receptor activity; TAS.
GO; GO:0007166; P:cell surface receptor linked signal transdu.
GO; GO:0008284; P:positive regulation of cell proliferation; TAS.
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MEDLINE=97098510;
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                                                                                               CARBOHYD
                                                                                                                                      CARBOHYD
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                                                                                                                                                                                                                                        DOMAIN
                                                                                                                                                                                                                                                                                          PROSITE;
                                                                                    CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUBCELLULAR LOCATION: Type I membrane protein. SIMILARITY: BELONGS TO THE CLASS II CYTOKINE FAMILY SIMILARITY: Contains 3 fibronectin type III domains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOW AFFINITY.
SUBUNIT: DIMER/OLIGOMER; DISULFIDE-LINKED.
AFFINITY IL-12 RECEPTOR IS COMPOSED OF AT
                                                                                                                                                                                                                                                                                                                                                                                                                     601642;
                                                       Transmembrane;
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642 862
224 306
421 508
519 607
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129 129
1166 195
195 195
271 271
347 347
347 347
376 480
185 185
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40, Last sequence update)
41, Last annotation update)
ceptor beta-2 chain precurso.
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H., Minetti L.J.,
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Primates;
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                                                                   CYTOPLASMIC (POTENTIAL).

FIBRONECTIN TYPE-III 1.

FIBRONECTIN TYPE-III 2.

FIBRONECTIN TYPE-III 3.

FIBRONECTIN TYPE-III 3.

FIBRONECTIN TYPE-III 3.

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     /FTId=VAR_
                                                          N-LINKED
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G -> R (IN dbSNP:2307148)
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                                                                                                                                                                                                                                                    INTERLEUKIN-12 RECEPTOR
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                                                       ED (GLCNAC. . .) (PO
(IN dbSNP:2307146).
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                                                                                                                                                                                                                                                                         Signal; Repeat;
         dbSNP:2307145)
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RESULT 10
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DEPR_RAT STANDARD; 062959; 035772; 035773; 054805; 062950; Q63007; Q63385; Q63386; 15-JUL-1999 (Rel. 38, Created) 15-JUL-1999 (Rel. 38, Last seque 28-FEB-2003 (Rel. 41, Last annot

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                                                                                                                                                                                                                                                                                           YQAEGGKG-----FSKTVNSSILQYGLESLKRKTSYIVQVMASTSAG-GTNGTSINF
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ISLSVFPS---
                          LCEEGAPNPYLKNSVTAREFLVSEKL
                                                                                YVTCPFRPDCPLGKSFEELPVSPEIPPRKSQYLRSRMPEGTRPEAKEQLLFSGQSLVPDH
                                                                                                              TPVFRHPPCSNWPQREKGIQGHQASEKDMMHSASSPPPPRALQAESRQLVDLYKVLESRG
                                                                                                                                                                                           PAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPSDKLVIDKLVVNFGNVLQEI
                                                                                                                                                                                                                          CLOGKANWMAFVAPSICIATIMVG
                                                                                                                                                                                                                                                                               WKERDSNSQPQLCEIPYRVSQNS----HPINSLQPRVTYVLWMTALTAAGESSHGNEREF
                                                                                                                                                                                                                                                                                                                                        ALSGDQ-GGCSSILGNSKHKAPLSGPHINAITEEKGSILISWNSIPVQEQMGCLLHYRIY
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"Phenotype-linked amino acid alteration Zucker fatty (fa/fa) rat.";
Biochem. Biochem.
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"Cloning
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FACE.

STRAIN-Sprague-Dawley, and Zucker fatty; PLOGUELLE.

STRAIN-Sprague-Dawley, and Zucker fatty; Ploguelle.

MEDLINE-9629531; PubMed-8702432;

Iida M., Murakami T., Ishida K., Mizuno A., Kuwajima M., Shima K.

"Substitution at codon 269 (glutamine --> proline) of the leptin

"Substitution at codon 269 (glutamine found in the Zucker fatty).
                                                                  STRAIN-Sprague-Dawl
MEDLINE-97415825; F
                                                                                                                                                             SEQUENCE OF 1-123 FROM N.A.
MORISHITA T., Hidaka T., Kuzuyama T.,
"Analysis of rat leptin receptor gene
submitted (FEB-1998) to the EMBL/GenB
                                                                                                                                                                                                                                                                                FEBS
                                                                                                                                                                                                                                                                                                STRAIN-Sprague-Dawley; TISSUE-Brain; MEDLINE-96368027; pubMed-8772180; Wang M.-Y. Zhou Y.T. Newgard C.B., "A novel leptin receptor isoform in
                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-Sprague-Dawley; TISSUE-Spleen; Park J.H., Ju S.K., Na S.Y., You K.H., Kim K.L.; Park J.H., Ju S.K., Na S.Y., You K.H., Kim K.L.; Park J.H., Ju S.K., Na S.Y., You K.H., Kim K.L.; Park J.H., Na S.Y., You K.H., Kim K.L.; Park J.H., Na S.Y., You K.H., Kim K.L.; Park J.H., Kim K.L.; Park J.H., Na S.Y., You K.H., Kim K.L.; Park J.H., P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNAs
rats
                                             Chien E.K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-Sprague-Dawley, MEDLINE-96212906; PubM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. (ISOFORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted [5]
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                       Bell G.I.
                                                                                                                    SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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    Increase
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n B.;
y of the rat l
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lar cloning of rat leptin receptor isoform identification of a missense mutation in ?
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ., Ogawa Y., Isse N., Okazaki T., Tamura N., Hosoda K., Nakao K.;
                                                                                                                  OF 557-802 AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FROM N.A.
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    'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of the rat leptin receptor."; (JUN-1996) to the EMBL/GenBa
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                                               Hara M.,
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                                                                       PubMed=9268737;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            wley, and Zucker
PubMed=8630068;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PubMed=8769097;
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leptin
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                                                  Rouard
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                                                                                                                  843-892
                                                                                                                                                             receptor gene.";
the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Robinson I.C.A.F.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=Wistar Munich: TISSUE=Kidney; Totsune K., Takahashi K., Mackenzle Sone M., Satoh F., Mouri T., Brenner Leptin receptor gene expression in Submitted (SEP-2000) to the EMBL/Gen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 694-878 FRO STRAIN-Sprague-Dawley;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chua S.C. Jr., White
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Phenotype
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Biochem. Biophys.
                                                                                                                                      SIMILARITY:
SIMILARITY:
                                                                                                                                                                    PTM: Phosphorylated on two tyrosine residues. Tyr-985 may be a major site of phosphorylation. Phosphorylation on both sites required for full activity (By similarity).

DISEASE: The fatty (FA) mutation produces profound obesity of early onset caused by hyperphagia, defective nonshivering thermogenesis, and preferential deposition of energy into addition.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 E) could function as a tran SUBCELLULAR LOCATION: Type which could be secreted. ALTERNATIVE PRODUCTS:
                                                                                        European
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                                                                                                                                                                                                                                                                 gestation
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                                                                                                                                                                                                                                                                                        TISSUE SPECIFICITY:
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                                                                                                   SWISS-PROT entry is copyright. It is produced through a collaboration en the Swiss Institute of Bioinformatics and the EMBL outstation -
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C. Jr., White D.W., Wu Peng X.S.

C. F. Chung W.K., Power-Kehoe
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                                            nd this statement is not removequires a license agreement (Semail to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      of fatty due
AAC52587.1; -. BAA12697.1; -. BAA12698.1; -.
                                                                                       Bioinformatics Institute.
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D85558; BAA12831.1; -...
D85559; BAA12831.1; -...
D805559; BAA12832.1; -...
D80151; AAB06616.1; -...
D80125; BAA12230.1; -...
AF287268; AAF89300.1; -...
US3144; AAB03088.1; -...
D80126; BAA12231.1; -...
               661
                                         250
                                                                                                                       545
                                                                                                                                                 134
                                                                                                                                                                             488
                                                                                                                                                                                                                                  431
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                                                                                                                                                                                                                                                         NISC-VYYYRKNLTCIWSPGKETSYTQYTVKRTYAFGEKHDNCTINSS----TSENRASC-
           LWKPLMKNDSLCSVRRYVVKHRTAHNGTWSQDVGNQTNLTFLWAESAHTVTV--
                               LWK-----KARGAPVLEKTLGYNIWYYPESN-TNLT----ETMNTTNQQLELHLGG
                                                                                    PFTEYVIALRCAVKES-KFWSDWSQEKMGMT-EEEAPC-GLELWRVLKPAEADGRRPVRL
                                                                                                                      ITINTGLLKYSWEKPYFP--ENNLQFQIRYGLNGKEIQWKTHEVFDAKSKSASLFYSDL-
                                                                                                                                                 LGIKR-MIQIEWIKPELAPVSSDLKYTLRFRTVNSTSWMEVNFAKNRKDKNQTYNLTGLQ
                                                                                                                                                                             LQTDGFYECVFQP-IFLLSGYTMWIRINHSLGSLDSPPTCVLPDSVVKPLPPS--NVKAE
                                                                                                                                                                                                                                 NISCETDGYLTKMTCRWSPSTIQSLVGSTVQLRY - - HRRSLYCPDNPSIRPTSELK - NCV
                                                                 -CAVYVVQVRCRRLDGLGYWSNWSSPAYTLVMDVKVPMRGPEFWRIMDGDITKKERNVTL
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FIBRONECTIN TYPE-III 1.
FIBRONECTIN TYPE-III 2.
FIBRONECTIN TYPE-III 3.
                                                                                                                                                                                                                                                                                     Pred. No. 2.8
); Mismatches
                                                                                                                                                                                                                                                                                                                 Score
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RESULT 11
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P42701;
01-NOV-1995
                                                                                                                                                                                             | Z | SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
Elloumi-Zghal H., Abdelhak S., Dellagi K.;
Elloumic structure of IL12RB1 gene.";
"Genomic structure of the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1995 (Rel. 32,
01-NOV-1995 (Rel. 32,
15-SEP-2003 (Rel. 42,
Interleukin-12 recepto
                                                      Proc.
                                                                                          MEDLINE-97098510; PubMed-8943050; Presky D.H., Yang H., Minetti L.J., Cr
Gately M.K., Gubler U.;
"A functional interleukin 12 receptor."
                                                                                                                                                                                                                                                                                                                                                                    Minetti L.J., Gubler U.;
                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.

MEDLINE=94267217: PubMed=7911493;
Chua A.O., Chizzonite R., Desai B.B., Truitt T.P
Minetti L.J., Warrier R.R., Presky D.H., Levine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-1995 (Rel. 32, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Interleukin-12 receptor beta-1 chain precursor
(Interleukin-12 receptor beta) (IL-12 receptor
Altare
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Ŧ.,
                                                                                                                                                                                                                                                                                                         ssion cloning of a human IL-12 receptor component. A new member
  cytokine receptor superfamily with strong homology to gpl30.";
unol. 153:128-136(1994).
                    TRP-213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OR IL12RB OR IL12R.
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                                                      cytokine receptor
l. Acad. Sci. U.S.I
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                                                          93:14002-14007(1996)
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Reichenbach J.,
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ine J.F., Gat
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Gately M.K.,
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Ensser A.,

Breıman

Α.,

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EMBL; AJZ97699; CAC10446.1;
EMBL; AJZ977699; CAC10446.1;
EMBL; AJZ97700; CAC10446.1;
EMBL; AJZ97700; CAC10446.1;
EMBL; AJZ97701; CAC10446.1;
EMBL; AJZ97701; IL1ZRB1.
FIR: 137892; 137892;
Genew; HGNC:5971; IL1ZRB1.
MIM; 601604; -5971; F:interleuk!
GO; GO:0005887; C:integral t
GO; GO:0016517; F:interleuk!
GO; GO:0016517; F:interleuk!
GO; GO:000488; F:transmembr
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GO; GO:0000587; F:interleuk!
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EMBL;
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InterPro; IPR003529; Hemtopoptn_L_F2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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"Interleukin-12 receptor
tuberculosis.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (; 601604; -. GO:0005887; C:integral to plasma membrane; 'TAS. GO:0005887; C:integral to plasma membrane; 'TAS. GO:0016517; F:interleukin-12 receptor activity; NAS. GO:0004888; F:transmembrane receptor activity; TAS. GO:0006960; P:antimicrobial humoral response (sensu Inver. GO:0007166; P:cell surface receptor linked signal transdu. GO:0008284; P:positive regulation of cell proliferation; NAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way the content is in the content in the content is in the content in the content is in the content in the content in the content is in the content in th
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L; AJ297688; CAC10446.1;
J; AJ297689; CAC10446.1;
L; AJ297690; CAC10446.1;
L; AJ297690; CAC10446.1;
J; AJ297691; CAC10446.1;
J; AJ297693; CAC10446.1;
L; AJ297693; CAC10446.1;
J; AJ297694; CAC10446.1;
J; AJ297696; CAC10446.1;
J; AJ297696; CAC10446.1;
J; AJ297697; CAC10446.1;
J; AJ297699; CAC10446.1;
J; AJ297700; CAC10446.1;
AJ297700; CAC10446.1;
J; AJ297701; CAC10446.1;
J; AJ297700; CAC10446.1;
J; AJ297802; CAC10446.1;
J; AJ297802; CAC10446.1;
J; AJ297802; AJ29882;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Note=No experimental confirmation available; DISEASE: Defects in IL12RB1 are a cause of susceptibility severe mycobacterial and Salmonella infections in otherwise.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUBUNIT: DIMER/OLIGOMER; AFFINITY IL-12 RECEPTOR IIL12RB2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUBCELLULAR LOCATION: Type I membrane protein ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        healthy individuals.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOW AFFINITY
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   ; Polymorphism.
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24 662
24 545
546 570
546 571 662
43 133
143 236
237 337
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348 444
445 540
ID 52 62
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                                                                                                                                                                                                                                                                                                                                                                                                                      FN3; 1.
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NVOLVED IN IL-12 TRANSDUCTION.
                                                                                                                                                                                                                                                                                                                                                 HEMATOPO_REC_L_F2; 1.
nbrane; Glycoprotein;
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INTERLEUKIN-12 RECEPTOR BI
EXTRACELLULAR (POTENTIAL)
POTENTIAL.
CYTOPLASMIC (POTENTIAL).
FIBRONECTIN TYPE-III 1.
FIBRONECTIN TYPE-III 2.
FIBRONECTIN TYPE-III 3.
FIBRONECTIN TYPE-III 4.
FIBRONECTIN TYPE-III 4.
FIBRONECTIN TYPE-III 5.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                              POTENTIAL
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                                                                                                                                                                                                                                                                                                                                              Signal; Alternative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 isoforms=2;
                                                                                                                                                                                                                              (POTENTIAL).
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                          ATWHGD---
                                                       SINFKTLSFSVFEIILITSLIGGGLLILIILTVAY-GLKKPNKLTHLCWPTVPNPAESSI
                                                                                      CPGVLKEYVVRCRDEDSKQVSEHPVQPTETQVTLSGLRAGVAYTVQVRADTAWLRGVWSQ
                                                                                                           RKGIICNYTIFYQAEGGKGFSK-TVNSSILQYGLESLKRKTSYIVQVMASTS-AGGTNGT
                                                                                                                                                         SVYPMLHDKVGEPYS--IQAY----AKEGVPSEGPETKVENIGVKTVTITWKEIPKSE
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                                                                                                                                   TIFASAHPEKLTLWSTVLSTYHFGGNASAAGTPH---HVSVKNHSLDSVSVDWAPSLLST
                                                                                                                                                                               TYCIEWQPVGQDGGLATCSLTAPQDPDPAGMATYSWSRESGA----MGQEK----
                                                                                                                                                                                                           TWMIEWFP - -
                                                                                                                                                                                                                             SGAAYNVAVISSNQFGPGLNQTWHIPADTHTEPVALNI---SVGTNGTTMYWPARAQSM-
                                                                                                                                                                                                                                                                                GCQGL-
                                                                                                                                                                                                                                                                                              EADGRRPVRLLWKKARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLG-----
                                                                                                                                                                                                                                                                                                                     LGSQGSSWSKWSSPVCVPPENPPQPQVRFSVEQLGQDGRRRLTLKEQPTQLEL----PE
                                                                                                                                                                                                                                                                                                                                                 AVKESKFWSDWSQ--
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GKETSYTQYTVKRTYAFGEKHDNCTTNSSTSENRASCSFFLPRITIPDNYTIE--VEAEN 102
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                                           -SIEVQVSDWLIFFASLGSFLSILLVGVLGYLGLNRAAR--HLC-PPLPTPCASSA
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21.7%;
                     -DFKDKLNLKES
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KAKM -> DR (in 1)
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                                                                                                                                                                                                      ----DVDSEP----TTLSWESVSQATNWTIQQDKLKPFWCYNI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R -> W (confers susceptibility mycobacterial and Salmonella in /FTId-VAR_015577.
M -> T (in dbSNP:375947).
/FTId-VAR_011986.
G -> R (in dbSNP:401502).
/FTId-VAR_011987.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 231.5; DB 1
Pred. No. 8.4e-10;
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/FTId=VSP_001715
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LEPR_MOUSE RESULT 12

LEPR_MOUSE

STANDARD;

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P48356; O3568b; O7568b; O7568b
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. (15000000: CTTOATN-BALB/C; TISSUE-Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tartaglia L.A., Dembski M., Weng X., Deng N., Culper Devos R., Richards G.J., Campfield L.A., Clark F.T., Muir C., Sanker S., Moriarty A., Moore K.J., Smutko Mays G.G., Woolf E.A., Monroe C.A., Tepper R.I.; "Identification and expression cloning of a leptin x
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalla; Eutheria; Rodentia;
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nat.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ellis S.J.,
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MEDLINE=96190816;
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suppression is
transcripts.";
                                          Chung W.K., Leibel R.L.;
"Fine structure of the murine leptin
                                                                                                                                                                                                                                                                                              Ghilardi N., Ziegler
                                                                                                                                                                                                                                                                                                                           MEDLINE-96270520;
                                                                                                                                                                                                                                                                                                                                                     STRAIN-FVB/N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Igel M., Becker W., Herberg L., Joos:
"Hyperleptinemia, leptin resistance,
in the New Zealand obese mouse.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lee J.I., Friedman J.M.; "Abnormal splicing of the leptin Nature 379:632-635(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lee
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ellis S.J., Lakey N.D., Culpepper J., Moo
Duyk G.M., Tepper R.I., Morgenstern J.P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cell 83:1263-1271(1995)
                                                                                                 Chua
                                                                                                                    MEDLINE=98008913;
                                                                                                                                                                                                                         Proc.
                                                                                                                                                                                                                                                   "Defective
                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                  Endocrinology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=97462708;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cioffi J.A., Shafer A.W., Zupancic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=96206286; PubMed=8616721;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Evidence that
                                                                                          S.C., Koutras
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84:491-495(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . -н.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FROM N.A. (ISOFORMS A AND VB/N; TISSUE=Spleen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Charlat O., Tartaglia L.A.,
                                                                                                                                                                      FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2:585-589(1996).
                                                                                                                                                                                                                                                   STAT
                                                                                                                                                                                                                         Acad.
                                                                                                                                                                                                                                                                                                                                                                                                                                  138:4234-4239(1997).
                     required
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the diabetes gene encodes the leptin
                                                                                                                                                                                                                      signaling
d. Sci. U.S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=Hypothalamus;
PubMed=8608603;
                                                                                                                                                                                                                                                                                                                           PubMed=8692797;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a mutation
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                                                                                                                       PubMed=9344648;
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                                                                                                                                                                    (ISOFORMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISOFORM
                                                                                          K., Han
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Montez
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                                                                                                                                                                                                                                                                                                     Wiestner
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                       form
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                                                                                                                                                                                                                   the leptin receptor 93:6231-6235(1996).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Craniata; Vertebrata;
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Joost
                                                                                                                                                                    ₿,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the leptin receptor
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                     two
                                                                                            Liu
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                                                                                                                                                                                                                                                                                                Α.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      possible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Т.Ј.,
                                                                                                                                                                      C
                                                                                                                                                                                                                                                                                                                                                                                В)
                     alternatively
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                                          receptor gene:
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                                                                                            S.M.,
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                                                                                                                                                                                                                                                                                                   Stoffel
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G. ;
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                                                                                            Кау
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Leptin receptor,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            diabetic mice.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Culpepper J., k F.T., Deeds
                                                                                          ų,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of leptin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (OB-R)
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                                                                                                                                                                                                                                                                                                Heim
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                                          splice site
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Murinae; Mus
                                                                                                                                                                                                                                              diabetic mice.";
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                                                                                                                                                                                                                                                                                                М.Н.,
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                                                                                            S.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        db/db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OB-R.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYR-1077 AND TYR-1138 MEDLINE=20261588; Publ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Banks A.S., Myers M.G. Jr.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=129;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-99061814; Publigel M., Taylor B.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Genomics 45:264-270(1997).
[8]
[8]
SEQUENCE FROM N.A. (ISOFORM B), AND VARIANT ASN-600
                                                                                                                                                                                                                                  entities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Banks A.S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PHOSPHORYLATION OF TYR-985 AND TYR-1138,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Murine leptin receptor genomic exon 18b and submitted (OCT-1998) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                     <del>-</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Hyperleptinemia
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                                                                                                                                                                                                        send
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            reproduction.

reproduction.

reproduction.

The short form (isoform A) may to the cerebrospinal fluid. The putative could function as a transport protein.

SUBCELLULAR LOCATION: Type I membrane prosume the country of the country o
                                                                                                                                                                                                                                                                                                                                                                                                           required for full activity.
SIMILARITY: BELONGS TO THE CYTOKINE FAMILY OF RECE
SIMILARITY: Contains 3 fibronectin type III domain
SIMILARITY: Contains 1 immunoglobulin-like domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hypothalamus, heart, and testes.
PTM: Phosphorylated on two tyrosine residues. major site of phosphorylation. Phosphorylation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FUNCTION: Receptor for obesity factor regulation of fat metabolism and in
                                                                                                                                                                                                                                                                                                        European
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              adipose tissue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE SPECIFICITY: Isoform A: highest level of ey and kidney, also present in kidney, heart, brain, muscle, choroid plexus and hypothalamus. Isoform i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 which could be secreted ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of expression in hypothalamus and lower level in brain,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Name=E
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required for normal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Event=Alternative splicing;
  U42467;
U46135;
U49106;
U49107;
U49108;
U49109;
U491109;
                                                                                                                                                                                                                                                                                                                                                           SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IsoId=P48356-4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IsoId=P48356-5;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IsoId=P48356-3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IsoId=P48356-1;
                                                                                                                                                                                                        an
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                                                                                                                                                                                                                                                     non-profit institutions as long and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                        the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QF
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                                                                                                                                                                                                          email
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SPECIFICITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Davis S.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  890-1162 FROM N.A.
AAA93014.1;
AAC52408.1;
AAC52420.1;
AAC52421.1;
AAC52422.1;
AAC52423.1;
AAC52423.1;
AAC52423.1;
                                                                                                                                                                                                                                                                                                        Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                   Swiss Institute of Bioinformatics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ic KK mouse strain.
21:337-345(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            downstream
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         275:14563-14572(2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and leptin receptor
KK mouse strain.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE=Hypothalamus;
; PubMed=9845674;
                                                                                                                                                                                                        to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PubMed=10799542;
S.M., Bates S.H.,
wnstream signals b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Isoform E: expressed in
                                                                                                                                                                                                                             license agreement (See http://www.isb-sib
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Phillips
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence=VSP_001703,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence=VSP_001701,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence=VSP_001699,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence=VSP_001697,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         lymphopoiesis. May
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Named isoforms=5
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Г.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Myers M.G. Jr.;
/ the long form
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    variant
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A) may act
                                                                                                                                                                                                                                                                        There are no restrictions ong as its content is in
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Rodentia;
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RA Presky D.H., Yang H., Minetti L.J., Chua A.O., Nabavi A. Gately M.K., Gubler U.;

"A Gartely M.K., Gubler U.;

"A functional interleukin 12 receptor complex is compo beta-type cytokine receptor subunits.";

Proc. Natl. Acad. Sci. U.S.A. 93:14002-14007(1996).

-i- FUNCTION: INVOLVED IN IL-12 TRANSDUCTION. BINDS TO LOW AFFINITY.

-i- SUBUNIT: DIMER/OLICOMER: DISULFIDE-LINKER TO THE PROCESSION OF THE PROC
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(Rel. 40, Last sequence update)
(Rel. 40, Last annotation update)
(Rel. 40, Last annotation precursor
n-12 receptor beta-1 chain precursor
n-12 receptor beta) (IL-12 receptor
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                                                                                                                                                                                                 204:432-445(1995).
                                                                                                                                                                                                                                                                                                                                                              Metazoa;
                                                                                                                                                                                                                                                                              Webster,
                                                                                                                                                                                                                                                                                                                                                                           (Mouse)
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HVTLPLLLGGVTQGASVLDDLWRTHKTAE
                                                                                                                             GKSFEELPVSPEIPPRKSQYLRSRMPEGTRPEAKEQLLFSGQSLVPDHLCEEGAPN----
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                                                                                           GDGTESPQAAPECA-----LDTRRPLETQRQRQVQALSEARRL---GLAREDCPRGDLA
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                                               PYLKNSVTAREFLVSEKLPEHTKGE
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STANDARD; , Created) , Last sequence upo , Last annotation , chain precursor. PRT; update) 3119 ·update) AΑ

FROM N.A., Chordata; Rodentia; AND ALTERNATIVE and C57BL Craniata; Ver Sciurognathi; 76J; TISSUE=Skin; SPLICING (ISOFORMS Euteleostomi; ; Murinae; Mus XIIA-1 AND

Vertebrata;

Muridae;

MEDLINE=96170761; PubMed=8601036; Boehme K., Li Y., Oh P.S., Olsen "Primary structure of the long an their .S., Olsen B.R.;
the long and short splice variants
tissue-specific expression during

of mouse embryonic

PARTIAL SEQUENCE FROM N.A., AND ALTERNATIVE SPLICING (ISOFORMS XIIA-2

MEDLINE=99348349; PubMed=10419532; fibroblast; carboxyl-terminal

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Σ.

Kania A.M., Reichenberger E., Baur S.T., Karimbux N.Y., Taylor R Olsen B.R., Nishimura I.;
"Structural variation of type XII collagen at its carboxyl-termi NC1 domain generated by tissue-specific alternative splicing.";
J. Biol. Chem. 274:22053-22059(1999).
-!- FUNCTION: TYPE XII COLLAGEN INTERACTS WITH TYPE I COLLAGEN-CONTAINING FIBRILS, THE COLL DOMAIN COULD BE ASSOCIATED WITH SURFACE OF THE FIBRILS, AND THE COL2 AND NC3 DOMAINS MAY BE LOCALIZED IN THE PERIFIBRILLAR MATRIX (BY SIMILARITY).
-!- SUBUNIT: TRIMER OF IDENTICAL CHAINS EACH CONTAINING 190 kDa WITH Q. THE

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MGD; MGI:88448; Coll2a1.
InterPro; IPR00087; Collagen.
InterPro; IPR003961; FN_III.
InterPro; IPR003961; FSPN.
InterPro; IPR003129; TSPN.
InterPro; IPR002035; VWF_A.
InterPro; IPR002035; VWF_A.
InterPro; IPR002035; VWF_A.
InterPro; IPR002035; VWF_A.
InterPro; IPR002039; TSPN; I.
IPFAm; PF00041; TSPN; I.
IPFAm; PF00092; VWA; 4.
IPFANTS; PR00453; VWFADOMAIN.
SMART; SM00210; TSPN; I.
SMART; SM00210; TSPN; I.
SMART; SM00210; TSPN; I.
SMART; SM00210; TSPN; I.
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                                                                                                                     PROSITE; PS50234; VWFA; 4.
Extracellular matrix; Connective tissue; Repeat; Hydroxylation; Coll adhesion; Collagen; Signal; Glycoprotein; Alternative spli
                                                                                                                                                                                                                                                                                                                                                                                       the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; U25652; AAA99719.1; ALT_SEQ. EMBL; U57095; AAB07047.1; -. HSSP; P02751; IFNA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     each end (By similarity).

PTM: Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains (By similarity).

PTM: O-glycosylation of isoform XIIA-2; glycosaminoglycan of chondroitin-sulfate type (By similarity).

SIMILARITY: BELONGS TO THE FIBRIL-ASSOCIATED COLLAGENS WITH INTERRUPTED HELICES (FACIT) FAMILY.

SIMILARITY: Contains 18 fibronectin type III domains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NONTRIPLE-HELICAL SEQUENCES (BY SIMILARITY) ALTERNATIVE PRODUCTS:
Event-Alternative splicing; Named isoforms-4;
Comment-The final tissue form of collagen X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Name=XIIB-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Name-XIIA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                          SWISS-PROT entry is copyright. It is produced through a collaboration en the Swiss Institute of Bioinformatics and the EMBL outstation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          me=XIIA-2; Synonyms=ER#K;
IsoId=Q60847-2; Sequence=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Comment=The final tissue form of collagen XII may contain homotrimers or any combination of the various isoforms;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IsoId=Q60847-3; Sequence=VSP_001150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IsoId=Q60847-1; Sequence=Displayed,
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VWFA 2.
FIBRONECTIN 'FIBRONECTIN'
FIBRONECTIN'
FIBRONECTIN'
                                                               VWFA 1.
FIBRONECTIN
                                                                                         COLLAGEN ALPHA 1(XII) CHAIN. FIBRONECTIN TYPE-III 1.
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 TYPE-III
TYPE-III
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              DDEVT - - - - VVEPASSTSVVLNSLRPETLYLVNVTAEYEDG - - -
                                   HDNCTTNSSTSENRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIAKTEP
                                                              SICLRIEQELAAIKKKAYVPPKDLRFTQVTANSFKAEWSPPGDNVFSYHV---
                                                                              SLC---KFSLAALPAK----PENISCVYYYRKNLTCTWSPGKETSYTQYTVKRTYAFGEK
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20.8%;
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CELL ATTACHMENT SITE (POTENTIAL).
HYDROXYLATION (BY SIMILARITY).
                                                                                                                                                                     MW;
                                                                                                                Score 224; DB Pred. No. 3.1e
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N-LINKED (GLCNAC. . .) (POTENTIAL).
N-LINKED (GLCNAC. . .) (POTENTIAL).
N-LINKED (GLCNAC. . .) (POTENTIAL).
Missing (in isoform XIIB-1 and isoform
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FIBRONECTIN
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                                                                                                                                                                     /FTId=VSP_001152.
W; 9B1F999C86AB3251
                                                                                                                                                                                               XIIB-2
                                                                                                                                                                                                                       /FTId=VSP_001151
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                                                                                                                                                                 Tartaglia L.A., Dembski M., Weng X., Deng N., Culpepper J.
Devos R., Richards G.J., Campfield L.A., Clark F.T., Deeds
Muir C., Sanker S., Moriarty A., Moore K.J., Smutko J.S.,
Mays G.G., Woolf E.A., Monroe C.A., Tepper R.I.;
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01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
                                                SEQUENCE FROM N.A. TISSUE=Fetal liver;
                                                                                                                                                                                                                                                                                             TISSUE-Brain;
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Mammalia; Eutheria;
                                                                                                                         "Identification and expression cloning Cell 83:1263-1271(1995).
                                                                                                                                                                                                                                                                  MEDLINE=96128129; PubMed=8548812;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
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LEPR OR OBR OR DB.
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                           MEDLINE=96398968; PubMed=8805376;
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  G.P.,
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  Yuan J.Q.,
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Thompson D.B., 1
"Structure and :
lean and obese |
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"Novel B219/OB receptor isoforms:
hematopoiesis and reproduction.";
hat. Med. 2:585-589(1996).
                                                                                       Sothern
"Exonic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bennett G.L., Williams M., Spencer S.A., Gur "Cloning and characterization of a human lep biologically active leptin immunoadhesin."; J. Mol. Endocrinol. 18:77-85(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                            ALTERNATIVE SPLICING DUE TO AN ENDOGENOUS RETROMEDLINE=9912823; PubMed=9929394; MEDLINE=9VL823; PubMed=929394; Kapitonov V.V. Jurka J.; The long terminal repeat of an endogenous retrative splicing and encodes an additional sequence in the human leptin receptor."; J. Mol. Evol. 48:248-251(1999).
                                                                                                                                                                                                 VARIANTS ARG-109; ARG-204; ARG-22
MEDLINE=97289527; PubMed=9144432;
Echwald S.M., Soerensen T.D., Soe
                                                                                                                                                                                                                                            Considine R.V., Considine E.L., Williams C.J., Hyde T.M., Ca "The hypothalamic leptin receptor in humans: identification incidental sequence polymorphisms and absence of the db/db m fa/fa rat mutations.";
Diabetes 45:992-994(1996).
           Roth H., Korn
Siegfried W.,
                      VARIANTS ARG-109;
MEDLINE=99075638;
Roth H., Korn T.,
                                                                                                 Chung W.K., Power-Kehoe L., Ch
Sothern M., Udall J.N., Kahle
                                                                                                                       VARIANTS ARG-109;
MEDLINE=97431549;
                                                                                                                                                                  Andersen T., Chung W.K., Leibel R.L., Pedersen O.; "Amino acid variants in the human leptin receptor: to juvenile onset obesity.";
                                                                                                                                                                                                                                                                                        MEDLINE=96270489;
Considine R.V., Co
                                                                                                                                                                                                                                                                                                                                   Welcher A.A., Horan T.;
"Human leptin receptor. Determination of di
"Human leptin receptor. Determination of di
N-dJycosylation sites of the extracellular
J. Biol. Chem. 273:28691-28699(1998).
                                                                                                                                                                                                                                                                                                                                                                                           CARBOHYDRATE-LINKAGE SITES, DISULFIDE MEDLINE=99003211; PubMed=9786864;
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Cioffi J.A., Shafer
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Luoh S.-M., Di Marco F., Levin N.,
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"A role for
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, Arakawa T., Bu
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T., Rosenkranz K.,
Mayer H., Hebebrand
disequilibrium and
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PubMed=9287054;
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           kranz K., Hinney A., Ziegler Æ
Hebebrand J., Grzeschik K.-H.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     M.H., Nelson
de Sauvage F
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  the
                                                                                                                                                                                                                                                                                                                                                                                  Rohde
                                                                                                              Huma
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                       Kunz
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                                                                                                                                                                                                                                                                               Caro J.
on of
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EMBL;
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EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                          EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gotoda T., Manning B.S., Goldstone A.P., Imrie H., Evans A.L., Strosberg A.D., McKeigue P.M., Scott J., Aliman T.J.;
"Leptin receptor gene variation and obesity: lack of association white British male population.";
Hum. Mol. Genet. 6:869-876(1997).
-!- FUNCTION: Receptor for obesity factor (leptin). Involved in tregulation of fat metabolism and in a hematopoietic pathway
                                                                                                                                                                                                                                                                                                                  EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hum.
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MEDLINE-97318795; PubMed-9175732;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 signal transduction by activation or JAN LYLLING STATS.

PTM: Phosphorylated on two tyrosine residues. Tyr-986 ma major site of phosphorylation. Phosphorylation on both s required for full activity (By similarity). OF RECEPTORS.

SIMILARITY: BELONGS TO THE CYTOKINE FAMILY OF RECEPTORS.

SIMILARITY: Contains 1 immunoglobulin-like domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   by non-profit institutions as long
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hypothalamus.

DOMAIN: The cytoplasmic domain may
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ALTERNATIVE PRODUCTS:
Event-Alternative splicing; Named isoforms=5;
Name=B; Synonyms=13.2, OBRb;
IsoId=P48357-1; Sequence=Displayed;
Name=A; Synonyms=6.4, HuB219.3;
IsoId=P48357-2; Sequence=VSP_001689, VSP_00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        to the cerebrospinal fluid (By similarity). SUBCELLULAR LOCATION: Type I membrane protein alternative process.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE SPECIFICITY: Isoform A expressed in fetal liver and hematopoletic tissues and choroid plexus. In adults highest expression in heart, liver, small intestine, prostate and or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE SPECIFICITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Name=D; Synonyms=HuB219.2;
IsoId=P48357-4; Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Name=C; Synonyms=12.1, OBRa;
IsoId=P48357-3; Sequence=VSP_001691,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          required for normal lymphopoiesis.
U43168
U664961
U666497
U592483
U592483
U59250
U5925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SWISS-PROT entry is copyright. It is produced through a caen the Swiss Institute of Bioinformatics and the EMBL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   otor gene in extremely obese German Genet. 103:540-546(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IsoId=P48357-5; Sequence=VSP_001688;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      level in lung and kidney. Isoform
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence=VSP_001693,
                 JOINED JO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    c domain may be activation of J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       There are no
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VSP_001690;
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Best Local S
Matches 142
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EMBL; U52913;
EMBL; U52914;
HSSP; P16471;
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DOMAIN
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TRANSMEM
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GO; GO:0007166; P:Cell surface
GO; GO:0007275; P:development;
GO; GO:0006112; P:energy reser
Interpro; IPR002996; CRIA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pfam; PF00041; fn3; 2.

SMART; SM00060; FN3; 4.

PROSITE; PS01353; HBMATOPO_REC_L_F2;

PROSITE; PS50835; IG_LIKE; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Polymorphism.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro; IPR003961;
InterPro; IPR003529;
InterPro; IPR007110;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                              VLAINSIGASVANENLTESWPMSKVNI----VQSLSAYPLNSSCV----IVSWILSPSD
                                                                                                                                                                                                                                              TLLWKPLMKNDSLCSVQRYVINHHTSCN-
                                                                                                                                                                                                                                                                                                             QSDGFYECIF---QPIFLLSGYTMWIRINHSLGSLDSPPTCVLPDSVVKPLPPSSVKAEIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMMPTTVVSLLSTTDLEKGSVCISDQFNSVNFSEAEGTEVTYEAESQRQPFVKYATLISN
                      ----IVQVMASTS-AGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVAYGL
                                                                                               KIINSFTQDDIEKHQSDAGLYVIVPVIISSSILLLGTLLISHQRMKKLFWEDVPNPKN--
                                                                                                                                               YKLMYFIIEW--KNLNEDGEIKWLRISSSVKKYYIHDHFIPIEKYQFSLYPIFMEGVGKP
                                                                                                                                                                                                                                                                      RLLWKKARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFW-----VS
                                                                                                                                                                                                                                                                                             V----YAVQVRCKRLDGLGYWSNWSNPAYTVVMDIKVPMRGPEFWRIINGDTMKKEKNV
                                                                                                                                                                                                                                                                                                                                                                   LGIKRMIQIEWIKPELAPVSSDLKYTLRF-RTVNSTSW--MEVNFAKNRKDKNQTYNLTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                          NISCETDGYLTKMTCRWSTSTIQSLAESTLQLRYHRSSLY--CSDIPSIHPISEPKDCYL
                                                                                                                       YSIQAYAKEGVPSEGPE-
                                                                                                                                                                      VNT--WMIEWFPDVDSEPTTLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGEP
                                                                                                                                                                                                                                                                                                                                             INI-GLLKISWEKPVFP--ENNLQFQIRYGLSGKEVQWKMYEVYDAKSKSVSLPVPDLCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Receptor;
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AAC50510.1;
AAC50511.1;
1BP3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  F:transmembrane receptor activity; TAP:cell surface receptor linked signal
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1165
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                                                -QGLNFQKPETFEHLFIKHTASVTCGPLLLEPETISEDISVDTSWKNKD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nsmembrane; Glycoprotein; Signal;
Repeat; Alternative splicing; Phosphorylation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 221;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LEPTIN RECEPTOR.
EXTRACELULLAR (POTENTIAL).
POTENTIAL.
CYTOPLASMIC (POTENTIAL).
FIBRONECTIN TYPE-III 1.
                                                                                                                                                                                                                      PVATLRIPATQEKSFQCIEVMQACVAEDQLVVKWQSSALD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IG-LIKE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
.2e-08;
                                                                                                                                                                                                                                               -GTWSEDVGNHTKFTFLWTEQAHTVT
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Searc Job t	DЪ	Qy	ф	Qy	Ъ	Qy
Search completed: August 4, 2003, 11:23:16 Job time : 31 secs	1100VSCPEPAPC 1108	630 NNLGGEKNGYVTCPFRPDC 648	1046 IISPHLTFSEGLDELLKLEGNFPEENNDKKSTYYLGVTSIKKRESGVLLTDKSR 1099		993 SKPSETGEEQGLINSSVTKCFSSKNSPLKDSFSNSSWEIEAQAFFILSDQHPN 1045	544 KKP
			1099	629	1045	591

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Run
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MEDLINE=21988187; PubMed=11877449;

MEDLINE=21988187; PubMed=11877449;

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Milline=1298817; Mongo J.A., Yi S., Gurney A., De fill and the second of the second 
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Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Butheria; Primates; Catarrhini; Hominidae;
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01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
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CRL3 protein
                                                             SEQUENCE FROM N.A.

Zhang W., Wan T., He L., Yuan Z., Cao X.;

"A novel soluble type I cytokine receptor.";

Submitted (NOV-1998) to the EMBL/GenBank/DDBJ

EMBL; AF106913; AAL36452.1;

EMBL; AF106913; AAL36452.1;
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GP130-like m
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EMBL; AF486621; AAM27959.1; -.

MGD; MGI:2180511; Glmr.
                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
NCBI_TaxID=10090;
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03 (TrEMBLrel. 23, La
e monocyte receptor.
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Score 2132.5; I
Pred. No. 8.3e-1
5; Mismatches 1
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Sciurognathi; Muridae;
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01-JUN-2002 (TrEMBLrel. 2:
01-OCT-2002 (TrEMBLrel. 2:
01-oct-2002 (TrEMBLrel. 2:
  Submitted (APR-2002) to the EMBL; AB083111; BAB88745.1; MGD; MGI:2180511; Glmr.
                                                                                                                                                                          Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                              GLMR
                                                         "Polymorphism between C57BL/6 receptor NR10.";
                                                                                                Nomura H., Yaguchi N.,
                                                                                                                   STRAIN=C57BL/6;
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Pfam; PF00041; fn3; 1.
SMART; SM00060; FN3; 3.
Receptor.
SEQUENCE 716 AA; 80598
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                                          VSPEIPPRKSQYLRSRMPEGTRPEAKEQLLFSGQS--LVPDHLCEEGAPNPYLKNSVTAR
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Matches 196
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MEDLINE=99056068; PubMed=9806927;
Geissen M., Heller S., Pennica D., Ernsberger U., F
"The specification of sympathetic neurotransmitter
on gpl30 cytokine receptor signaling.";
Development 125:4791-4801(1998).
EMBL: AJ011688; CAB42084.1; ...
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
^^^^^anuria: Aves; Neognathae; Galliformes; Phasianidae; Phasiani
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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 691
                                                                                                                        571
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              129
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 78
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
 SFTDVSVVEIEADDKKSFSEQDLKP
                                                                                                                                                                                                                                                            ALDVNTWMIEWFPDVDSEPTTLSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGE
                                                         LAFLLIVLLGVLFCFNKRDLIKKHIWPNVPDPSKSNIAQWSPQVPAKHDFSSKDQMYPEG
                                                                                       GGLLILIILTVAYGLKKPNKLTHLCWPTVPNPAESSIATW-----
                                                                                                                     AVSVDPSKTEYTLSSLTSDTLYTVRMMAYTDAGGRSGPDFTFTTQKFGRGEIEAIVVPVC
                                                                                                                                                 SKTVNSSILQYGLESLKRKTSYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIG
                                                                                                                                                                                 GOSVKAYLOOGRPSKGPTVQTKKVGKAEAVLTWNHLTVDEQNGFIRSYTILYKTVDGNET
                                                                                                                                                                                               PYSIQAYAKEGVPSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGF
                                                                                                                                                                                                                                            PNNVLKYVIEWCLMSNSSDCITEWQTEPGNIQGTYLKGDIKPFKCYLITVYPLFADGQGS
                                                                                                                                                                                                                                                                                                     LTLKLPNGTYEVTVVAHNRVGASPPSVLLIPSSNSKA--PVKNIRTLPKDGKLWVGW-TA
                                                                                                                                                                                                                                                                                                                                  LELHLGGESFWVSMISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAEDQLVVKWQSS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                NRKDKNQTYNLTGLQPFTEYVIALRCAVKES-KFWSDWSQEKMGMTEEEAPC-GLELWRV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PS01353;
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IPR003961; FN_III.
IPR003529; Hemtopoptn_L_F2
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                            ESDDSVNTEDRILKPCSTPSDKLVIDKLVVNFGNVLQEIFTDEARTGQEN
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102495 MW;
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26.78;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 707.5;
Pred. No. 1.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               POTENTIAL
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Best Local S
Matches 144
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01-JUN-1998
01-MAR-2003
      SEQUENCE Chen J., "Partial
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XGP130.
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057519;
                                                                                              Xenopodinae; xenopus
NCBI_TaxID=8355;
[1]
                                                                                                                                                                             Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniat
Amphibia; Batrachia; Anura; Mesobatra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the RIKEN Genome Exploration Research "Analysis of the mouse transcriptome to 7.70 full-length cDNAs.";
Nature 420:563-573(2002).
EMBL; AK030512; BAC26998.1;
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Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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FROM N.A.
Grace A., Chien I
characterization
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                                                                                                                                                                                      Anura; Mesobatrachia;
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Pred. No. 5.1e
25; Mismatches
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Sciurognathi;
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based on functional
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   Xenopus gp130.";
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                                                                                                                                                                                      Pipoidea;
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057520
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EMBL; AF04
HSSP; P401
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SMART; SM00660; FN3; 3.
PROSITE; PS01353; HEMATOPO_REC_L_F2; 1.
SEQUENCE 881 AA; 99003 MW; 7DE7942D211138A0 CRC64;
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P40189; 1BQU.
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                                                                                                                                                                                                                                                          DIKKHIWPNVPDPSKSNIAQWSPQTPNRHDFNAKGHPFQDGSFTDVSVVEITAKQKPEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FSLAALPAKPENISCYYYYRKNLTCTWSPGKETSY-TQYTVKRTYA-FGEKHDNCTTNSS
                                                                                                               LVPDHLCEEGAP---NPYLKNSVTAREF----LVSEKLPEH
                                                                                                                                                  TVIISGYRDQQP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PVATLRIPAIQEKSFQCIEV-----MQACVAEDQLVVKWQSSALDVNTWMIEWFPDVDSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KNLSDSVANGEILLYSVTFQSGSQST---TFNVTGTSYKKTLSKDLYSVSVTAYNRRFAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NTVYEVSIRCIHKDGHGFWSDWSELKKQVTPEAPPSRGPDIWKKIDSPDANGNRDVMIMW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FTEYVIALRCAVKESK-FWSDWSQEKMGMTEEEAPC-GLELWRYLKPAEADGRRPVRLLW
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                                                                                                                                                                            GYVTCPFRPDCPLGKSFEELPVSPEIPPRKSQYLRSRMPEGTRP----EAKEQLLFSGQS
                                                                                                                                                                                                       DIKSMDPLKKNTSEP-----LSSGIGGSSCLSSPRLSASDCDEVESAQTTSSTVQYS
                                                                                                                                                                                                                                  SVNTEDRILKPCSTPSDKLVIDKLVVNFGNV-----LQEIFTDEARTGQENNLGGEKN
                                                                                                                                                                                                                                                                                         NKLTHLCWPTVPNPAESSIATW------HGDDFKD-----
                                                                                                                                                                                                                                                                                                                 HTVLCTHA-GIQERGGKDGPIFTFTTLKFANGEVEAIVVSCCVVFLILVLIAVILCFNNR
                                                                                                                                                                                                                                                                                                                                           KTSYIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVAYGLKKP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PPSKLNIP----RSGNCQVLHPEFKLKAFPKDKQLWVEWTPQNKSLDGYIIEWCNKYAKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KKARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWVSMISYNSLGKS
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  (TrEMBLrel.
                            PRELIMINARY;
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                                                                                             KEGEPQGANQYFKQNCGREDFTNKLQALHQEEPSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15.9%; Score 620.5; DB 13; 25.5%; Pred. No: 1.2e-40; Live 123; Mismatches 344;
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InterPro; IPR003529; Hemtopoptn_LF2.
Pfam; PF00041; fn3; 4.
SMART; SM00060; FN3; 3.
PROSITE; PS01353; HEMATOPO_REC_L_F2;
NON_TER 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chen J., Grace A., Chien K.R.;
"Partial characterization of putative Submitted (JAN-1998) to the EMBL/GenBa EMBL; AF041846; AAC03532.1; -. HSSP; P40189; 1BQU.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE=Heart;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
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01-mAR-2003 (TrEMBLrel.
Gp130p3 (Fragment).
KGP130.
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              SAQTTSSTVQYSTVIISGYRDQQPSAVAPH----
                                      SFEELPVSPEIPPRKSQYLRSRMPEGTRPEAKEQLLFS-GQSLVPDHLCE-----
                                                                                                                                                 THLCWPTVPNPAESSIATW-----
                                                                                                                                                                                          YIVQVMASTSAGGTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVAYGLKKPNKL
                                                                                                                                                                                                                                KQVEKYRAILQWTPVPFDKRNGFIRNYTITYKSSHGNASTVVIDPTDTEYTLSKLEGNTL
                                                                                                                                                                                                                                               ENIGVKTVTITWKEIPKSERKGIICNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKTS
                                                                                                                                                                                                                                                                                     SDWQRETRNVNGTFLRGELEPLKCYLIKVYRLYKDGCESVRSEEAYLQQGTPLVGPNIHT
                                                                                                                                                                                                                                                                                                      LSWESVSQATNWTIQQDKLKPFWCYNISVYPMLHDKVGEPYSIQAYAKEGVPSEGPETKV
                                                                                                                                                                                                                                                                                                                                           KLNIPRSGNCPVLDQEFR----VKTFPKEEKLWVEWTPPNKSLDGYIIEWCNKYAQEGCI
                                                                                                                                                                                                                                                                                                                                                                     TLRIP-----AIQEKSFQCIEVMQACVAEDQLVVKWQSSALDVNTWMIEWFPDVDSEPTT
                                                                                                                                                                                                                                                                                                                                                                                                 SDSVANGKILLYGVTFQSGSQST---TFNVTTTSYKKTLSKDLYSVSVTAYNGRFASPPS
                                                                                                                                                                                                                                                                                                                                                                                                                         RGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWVSMISYNSLGKSPVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      YEVSIRCIKEDGRGFWSDWSEVKKQVTPEAQPSRGPDVWKKIESPDANGNREVMIMWKNL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               YVIALRCAVKESK-FWSDWSQEKMGMTEEEAPC-GLELWRVLKPAEADGRRPVRLLWKKA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PNALKIKWRNPLLNAFT - - LKYNIRYRPYKNQDW - EMVPEEDTASHRDSFTLQDLLPYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NSGSCSIFYPEFQFFVDTTLQVEVKNELGSQESDTLTVDPVNIVKPNPPEVSDLISAVEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIAKTEPPKIFRVKPVLGI 136
                                                                                           TPSDKLVIDKLVVNFGNVLQEIFTDEARTGQENNLGGEKNGYVTCPFRP----
                                                                                                                      KKHIWPNVPDPSKSNIAQWSPQTPSRHDFNTKGHPFQDGSFTDVSVVEITAEHQ-----K
                                                                                                                                                                            YSVHMVAYTEEGGKDGPIFTFTTLKFANGEVEAIVVSCCVAFFILVIIGVMLCFNKRDLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          710 AA;
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25.5%;
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23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Furative Xenopus
EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 606; DB 13;
Pred. No. 1.3e-39;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                 ----HGDDFKDKLNLKESDDSVNTEDRILKPCS
              - VFSRSESTQPLLDCEERPEEPPPGD
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databases.
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Best Local S
Matches 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chiang C., Lunney J.K.;

"Limited effect of recombinant porcine interleukin-12 on lymphocytes due to a low expression of IL-12 Beta2 recept submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.

EMBL; AF448143; AAL60218.1;

InterPro; IPR00396; FN_III.

InterPro; IPR003529; Hemtopoptn_L_F2.
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NON_TER
NON_TER
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SMART; SM00060; FN3; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. Solano-Aguilar G.I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q8WN24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS01353; HEMATOPO_REC_L_F2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KFSLAALPAKPENISCVYY-YRKNLTCTWSPGKETS-YTQYTVKRTYAFGEKHDNCTTNS
: |: |: |: | | | | | | | |
                                                                                                                                                                                                                                                                                                                                                          GLQPFTEYVIALRCAVKESK-FWSDWSQEKMGMTEEEAPCG-LELWRVLKPAEADGRRPV | :|| | | ::| : : : |: : |: : |: :
                      HALSGDQGGRS-SIRGDLKHKAPLSGPHINAISEEKGSILISWDEIPAQEQMGCILHYRI
                                                                                                                                                                                                                                                                                              RLLWK-----KARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWVSM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EISVGVVPEQPQNVSCMQKGERGTVACSWDRGRDTHLYTAYTLQLN----GPK---NLTWQK
                                                          YPMLHDKVGEPYSIQAYAKEGVPSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTI
                                                                                                GEGATAVQEYVVEW-----RELHLRGGMQPPLSWPRSPPYNTSTLISDNIKPYICYEIRV
                                                                                                                                       --SALDVNTWMIEWFPDVDSE---
                                                                                                                                                                               VSAANSKSSSLPTR---
                                                                                                                                                                                                                   ISYNSLGKSPVATLRIPAIQEKSFQCIEVMQACVA-------EDQLVVKWQS-
                                                                                                                                                                                                                                                          SLFWKNLSLSEARG-----KILHYQVTLQEVAEGNATLQNITERNSWTWTIPRTGIWAAA
                                                                                                                                                                                                                                                                                                                                  DLKPFTEYEFQISSKPHLQKGRWSDWSESLRTQTPEKEPTGMLDVWYMKQHIDYK-RQQI
                                                                                                                                                                                                                                                                                                                                                                                                               IKCVNASMSTCTLQWRDEGLV-----LLNRLRYRPVYSRSWNMVN-ATNAKGR----HDLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                   VKPVLGIKRMIQIEWIKPELAPVSSDLKYTLRFRTVNSTSWMEVNFAKNRKDKNQTYNLT 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEGEPQGGNQYFKQNCGLEDFTNKLQQEEPSHIQEQL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA;
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94753 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 430.5;
Pred. No. 1.
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                                                                                                                                                                             --- INIADLCGAGLLAPQQVSANPEGSDNLLVKWTSP
                                                                                                                                       ----PTTLSWESVSQATNWTIQQDKLKPFWCYNISV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          848
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ches 329;
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Sus.
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Best Local
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InterPro; IPR003529; Hemtopoptn_L_F2.
Pfam; PF00041; fn3; 3.
SMART; SM00060; FN3; 4.
PROSITE; PS01353; HEMATOPO_REC_L_F2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Cloning of porcine interleukin-12 receptor beta Submitted (DEC-2000) to the EMBL/GenBank/DDBJ dat EMBL; AF330213; AAM47543.1; ... INTERPRO 1 IPR00296; CRIA. INTERPRO 1 IPR003961; FN_III. INTERPRO 1 IPR003529; Hemtopoptn_L_F2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Mammalia; Eutheria; NCBI_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q8MJS1;
01-OCT-2002 (TrEMBLrel.
01-OCT-2002 (TrEMBLrel.
01-MAR-2003 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sus scrofa (Pig)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q8MJS1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kokuho
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248
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                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                    DLKPFTEYEFQISSKPHLQKGRWSDWSESLRTQTPEKEPTGMLDVWYMKQHIDYK-RQQI
                                                                        GLQPFTEYVIALRCAVKESK-FWSDWSQEKMGMTEEEAPCG-LELWRVLKPAEADGRRPV
                                                                                                                                                                                           QCSDYYCDSLDLGINLPPESPESSYTAQVTAINSLGTASSLPSTFTFLDVVRPLPPWDIR
                                                                                                                                                                                                                 STSE---NRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIAKTEPPKIFR
                                                                                                                                                                                                                                                                      EISVGVVPEQPQNVSCMQKGERGTVACSWDRGRDTHLYTAYTLQLN---GPK--NLTWQK
                                                                                                                                                                                                                                                                                                            KFSLAALPAKPENISCVYY-YRKNLTCTWSPGKETS-YTQYTVKRTYAFGEKHDNCTTNS
RLLWK----
                                                                                                                IKCVNASVSTCTLQWRDEGLV-----LLNRLRYRPVYSRSWNMVN-ATNAKGR---HDLV
                                                                                                                                                     VKPVLGIKRMIQIEWIKPELAPVSSDLKYTLRFRTVNSTSWMEVNFAKNRKDKNQTYNLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FYQAEGGKGFSK----TVNSSILQYGLESLKRKTSYIVQVMASTSAG-GTNGTSINF---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         --PQHISLSVFPS----NSLHPLTFSCGEKL 836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LVPDHLCEEGAPNPYLKNSVTAREFLVSEKL 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FRRPHHPNWPGKGQRLQGHHASEEDTGSSASSPPPPRALTAETGPAVDLYKVLGSR----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PDPANS---TW-----AKKYPTVEEKKQLSL-DRLLADWPTPEEPEPLVINEVLPQVTPV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GKANWSTE-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   YWKERDSDSQPQLCEIPYRVSPKSHPINSLQPRVTYVLWMTALTAAGESPQGNEREFCLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VTCPFRPDCPLGKSFEELPVSP-EIPPRKSQYLRSR---MPEGTRP--EAKEQLLFSGQS
                                                                                                                                                                                                                                                                                                                                                                                                                               861 AA;
                                                                                                                                                                                                                                                                                                                                                  Conservative 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RPDSKPGNPVSHLTVLPVDYLPTHEGYLPSNIDYLPSHEAPITDSLEEL---
-KARGAPVLEKTLGYNIWYYPESNTNLTETMNTTNQQLELHLGGESFWVSM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chordata; Craniata; Vertebrata; Cetartiodactyla; Suina; Suidae;
                                                                                                                                                                                                                                                                                                                                                                                                                               96055 MW;
                                                                                                                                                                                                                                                                                                                                                                       10.9%;
24.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22, Created)
22, Last sequence update)
23, Last annotation update)
beta 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -VAPSICIAVITVGVFSMRCFRQKVFVLLLALRP----QWCSREI
                                                                                                                                                                                                                                                                                                                                                                         Pred.
                                                                                                                                                                                                                                                                                                                                                                                         Score 425.5;
                                                                                                                                                                                                                                                                                                                                                                                                                               2AB663E3C5F42534 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                  ed. No. 4.8e-25;
Mismatches 339;
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Q9BEG2
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ID Q9BEG
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DT 01-W
DT 11-11
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GN Eukan
OC Mamma
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   Query
                                                                                                                                                                                                          TISSUE-Lymph node; Waldvogel A.S., Zakher A., Heussler V.T.; Submitted (FEB-2001) to the EMBL/GenBank/DDBJ EMBL; AJ3084.26; CAC28320.1; -. HSSP; P40189; 1BQU.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-2001 (TrEMBLrel. 01-JUN-2001 (TrEMBLrel. 01-MAR-2003 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                              Bos taurus (Bovine).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eute
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora;
Bovidae; Boyinae; Bos.
                                                                                                                                       InterPro; IPRO02996; CR1A.
InterPro; IPR003961; FN_III.
InterPro; IPR003529; Hemtopoptn_L_F2.
Pfam; PF00041; fn3; 3.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q9BEG2
                                       SEQUENCE
                                                                     SIGNAL
                                                                                                         SMART; SM00060; FN3; PROSITE; PS01353; HE
                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=9913;
                                                                                         Receptor;
                                                                                                       PROSITE;
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                                                                                                                                                                                                                                                                                               EQUENCE FROM N.A.
     Match
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                                                                                                       HEMATOPO_REC_L_F2; 1.
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IL-12 RECEPTOR BET/
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                                                                O70535 PRELIMINARY;
O70535;
O1-AUG-1998 (TrEMBLrel. 07,
O1-AUG-1998 (TrEMBLrel. 07,
O1-MAR-2003 (TrEMBLrel. 23,
Leukemia inhibitor factor r
Rattus norvegicus (Rat)
Eukaryota; Métazoa; (
Mammalia; Eutheria; I
NCBI_TaxID=10116;
[1]
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                                                                                                                                                                                                                                                            QHISLSIFPS---
                                                                                                                                                                                                                                                                                            DHLCEEGAPNPYLKNSVTAREFLVSEKL
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                                   Chordata;
Rodentia;
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                                                                                                                                                                                                                                                            -SSLRPLTFSCGEKL
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QISLFWKNLSLSEARG-----KILHYQVTLQKVAGGEITLQNITEHTSWTWVIPRTGNWA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPS--DKLVIDKLVVNF----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CYEIRVHALAGDQ-GGCNSTRGNSQHKAPLSGPHINAISEEKGSVLISWDEIPAREQMGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CYNISVYPMLHDKVGEPYSIQAYAKEGVPSEGPETKVENIGVKTVTITWKEIPKSERKGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TPPEKATAAVQEYVVEWRELHPGAGMQP-PLGW---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---QSSALDVNTWMIEW----FPDVDSEPTTLSWESVSQATNWT----IQQDKLKPFW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SMIS-YNSLGKSPVATLRIPAIQEKSFQCIEVMQACVAE-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VKPVLGIKRMIQIEWIKPELAPVSSDLKYTLRERTVNSTSWMEVNF - - AKNRKDKNQTYN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QCNDHYCDHLDLGINLTPESLESSYTVKVTAINSLGSASSFPFSFTLLDIVRPLPPWDIR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            PFRPDCPLGKSFEELPVSP-EIPPRKSQYLRSRM---PEGTRP--EAKEQLLFSGQSLVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PPHHRSWSEKGQGVQGHYTSEEDTGYSASSPPPPRAPTAETGQGVDLYKVLGSKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PANS---TW----AKKYPIVEEKTQL-ALDRLLTEWPTPEEPEPLVINEVLCRVTPVFR
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                                                                                                                                                                                                                                                                                                                                                                                                                                  PDSKPGNPASPLTILPVDYLPTHDGYLPSNMDYLPSHEAPITDPLEEL
                                                                         07, Created)
07, Last sequence update)
23, Last annotation update)
or receptor alpha-chain.
Craniata; Vertebrata;
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -RINITDLCGAELLAPQQVLAKSEGMDKLMVTW
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                          Euteleostomi;
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Best Local S
Matches 151
099650
099650;
01-MAY-1997 (TrEMBLTel. 0
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Interpro; IPR003961; FN_III.
Interpro; IPR003529; Hemtopo
Pfam; PF00041; fn3; 4.
SMART; SM0060; FN3; 4.
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STRAIN-Wister-Imamichi; TISSUE-Liver;

MEDLINE-98007878; PubMed-9349722;

Alkawa J., Ikeda-Naiki S., Ohgane J., Min K.S., Imamura T., Sasai K.

Shlota K., Ogawa T.;

"Molecular cloning of rat leukemia inhibitory factor receptor alpha-
chain gene and its expression during pregnancy.";

Biochim. Biophys. Acta 1353:266-276(1997).

EMBL; D86345; BAA25907.1;

EMBL; D86345; BAA25907.1;

EMBL; D80345; BAA25907.1;
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                                                                                                                     868
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                                                                                                                    DIPNPENCKALQF
                                                                                                                                          TVPNPAESSIATWHGDDFKDKLNLKESDDSVNTEDRILKPCSTPSDKLVID
                                                                                                                                                                                                                                                                                            DKVGEPYSIQAYAKEGVPSEGPETKVENIGVKTVTITWKEIPKSERKGIICNYTIFYQAE
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                                                                                                                                                                                                                           GERDTPKTRSLETSHSDIKLKNITDISQKTLR--IADLQGKTSYHLVLRAYTHGGLGPEK
                                                                                                                                                                                                                                                                              STIG-----YIEELAPIVAPNETVEDTSADSILVKWDDIPVEELRGFLRGY-LFYFQK
                                                                                                                                                                                                                                                                                                                                 TCDYVIKWCNSSWSEPCLLDWIKVPSNSTGTVIESDQFQPGVRYNFYLYGCTNQGYQLLR
                                                                                                                                                                                                                                                                                                                                                       VNTWMIEWFPDVDSEPTTLSWESV-SQATNWTIQQDKLKPFWCYNISV-----YPMLH
                                                                                                                                                                                                                                                                                                                                                                                      KNDYIISVVARNSAGSSPPSKIASMEIPN-----DDITVEQAVGIGNRIFLSWQHNPNM
                                                                                                                                                                                                                                                                                                                                                                                                    EWSSDGKNLI-IYWKP---LPINEANGKILSYNVSCSSSEETQSLSEILDDQHKAEIKVN
                                                                                                                                                                                                                                                                                                                                                                                                                                                          -KNQTYNLT--GLQPFTEYVIALRCAVKESKFWSDWSQEKMGMTEEEAPC-GLELWRVLK
                                                                                                                                                                         SMFVVTKENSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AEDSTYHVAVDKLNPYTIYTFRVRCSSETFWKWSKWSNEKRYLTTEATPSKGPDTWR----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VKDV--NSTVVTLSWYLPG-------NFTKINLVCQIEICKANSKKEVRNVTMRG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -SENRASCSFFLPRITIPD----NYTIEVEAENGDGVIKSHMTYWRLENIAKTEPPKIFR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10.1%; Score 395.5; 23.2%; Pred. No. 1.76 tive 115; Mismatches
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                        03,
                                                                                                                                                                                                                                                  -----VNSSILQYGLESLKRKTSYIVQVMASTSAGGTNGT
                        Created)
                                                                                                                   -QKSVCEGSNALKTLE - - MNPC - TPNHVEVLE
                                                                                                                                                                    -GLIIAILIPVAVAVIVGVVTSILCYRKREWIKETFYP
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Best Local S
Matches 182
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MEDLINE-97115791; PubMed-8999038;

-'~" R., De Imus C., Friend D.,
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InterPro; IPR003529; Hemtopoptn_L_F2.
InterPro; IPR001005; Myb_DNA_binding.
Pfam; PF00041; fn3; 4.
SMART; SM00060; FN3; 4.
PROSITE; PS01353; HEMATOPO_REC_L_F2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAY-1997 (TrEMBLrel. 03, Last sequence update) 01-MAR-2003 (TrEMBLrel. 23, Last annotation updat Oncostatin-M specific receptor beta subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; U60805; AAC Genew; HGNC:8507;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Dual oncostatin M (OSM) receptors. Cloning alternative signaling subunit conferring OSM
                                                  642
  702
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
DNLKPESFYEFFITPFTSAG -- EGPSATFTKVTTPDEHSSMLIHILLPMVFCVLLIMVMC
                  ESLKRKTSYIVQVMASTSAGGTNGTSINF-KTLSFSVFEIILITSLIGGGLLILIILTVA
                                                                    TITWKEIPKSERKGIICNYTIFYQAEGGK---GFSKTV---NSSILQYGL----
                                                                                                                                                                                                                       TMNTTNQQLELH-------LGGESFWVSMISYNSLGKSPVATLRIPAIQEKSFQC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chem.
                                                  TLSWKDYSTESQPGFIQGYHVYLKSKARQCHPRFEKAVLSDGSECCKYKIDNPEEKALIV
                                                                                                    DAFRPGVRYDFRIYGLSTKRIACLLEKKTG
                                                                                                                             DKLKPFWCYNISVYP-----
                                                                                                                                                                                                                                                        PSEAP---DVWRIVSLEP----GNHTVTLFWKPLSKLHANGKILFYNV------VVE
                                                                                                                                                                                                                                                                                                                                                                                                                               STSENRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIAKTEPPKIFRVKP
                                                                                                                                                                                                                                                                                                                                                                                                                                                            EPKDFSCETEDFKTLHCTWDPGTDTALGWSKQPSQSYTLFESFS-GEKKLCTHKNWCNWQ
                                                                                                                                                                            IEVMQACVA -- EDQLVVKWQSSALDVNTWMIEWFPDVDSEPTTLSWESVS-QATNWTIQQ
                                                                                                                                                                                                       NLDKPSSS-ELHSIPAPANSTKLILDRCSYQICVIANNSVGASPASVIVISADPENK---
                                                                                                                                                                                                                                                                      -EEAPCGLELWRV--LKPAEADGRRPVRLLWKKARGAPVLEKTLGYNIWYYPESNTNLTE
                                                                                                                                                                                                                                                                                                          HGEGKMMQYNVSIKVNGEYFLSELEPATEYMARVRCA-DASHFWKWSEWSGQNFTTLEAA
                                                                                                                                                                                                                                                                                                                                    --KDKNQTYN---
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                                                                                                                                                                                                                                                                                                                                                                                                             ITQDSQETYNFTL----IAENYLRK-------RSVNILFNLTHRVYLMNP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KPENISCVYYYRKNLTCTWSPGKETSY -----TQYTVKRTYAFGEK----HDNCTTNS
                                                                                                                                                     -EVEEERIAGTEGGFSLSWKPQPGDVIGYVVDWCDHTQDVLGDFQWKNVGPNTTSTVIST
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                                                                                                                                                                                                                                                                                                                        --LTGLQPFTEYVIALRCAVKESKF--WSDWSQEKMGMTE---
                                                                                                                                                                                                                                                                                                                                                            -----FSVNFENVNATNAIMTW-KVHSIRNNFTYLCQIEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 375;
Pred. No. 6.
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                                                                                                                            -MLHDKVGEPYSIQAYAKEGVPSEGPETKVENIGVKTV
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Best Local
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Gallus gallus (Chicken).

Metazoa; Chordata;
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01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                   Signal; Receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS01353; HEMATOPO_REC_L_F2; PROSITE; PS01355; HEMATOPO_REC_S_F1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam; PF00041; fn3; 4
SMART; SM00060; FN3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      through LIFRbeta-containing receptors. Development 129:1387-1396(2002). EMBL; AJ416111; CAC94786.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE=21870003; PubMed=11880348;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytokine receptor-beta precursor.
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                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR003529; Hemtopoptn_L_F2.
InterPro; IPR003531; Hemtopoptn_S_F1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Duong C.V., Geissen M., Rohrer H.;
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                                                                                                                   VLGIKRMIQIEWIKPELAPVSSDLKYTLRFRTVNSTSWMEVNF - -
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    VSMPGGKFSNYTAQLNALHPYTKYQFKVRCSAADHFWRWSDWSGTLEYTTLEAPPTRGPD
                                                                                                                                                            KKHVCGF -- PVLADQKTYSFILGASN ----
                                                                                                                                                                                               NRASCSFFLPRITIPDNYTIEVEAENGDGVIKSHMTYWRLENIAKTEPPKIF----RVKP
                                                                                                                                                                                                                                    PDTPKGLSCETSNFVIIKCTWKPGRATGLYKARGTKYSL--TESISGKNVSCEVNE--MK
                                       --AKNRKDKNQTYNLTGLQPFTEYVIALRCAVKESKF-WSDWSQEKMGMTEEEAPC-GLE 231
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1083 AA;
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Pred. No. 9.7e
D6; Mismatches
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088821;
01-NOV-1998
01-NOV-1998
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SEQUENCE
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TEGSQEMYNFTLTAENQLRKRSVNINFNLTHRVHPK--APQDVTLKI-
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IGATKANM

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MEDLINE=99120951; PubMed=9920829; MEDLINE=99120951; PubMed=9920829; Medline Mara T., Copeland N.G.,
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Mammalia; Eutheria;
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                                                                                                                                                                                                                                            SMART; SM00060;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=10090;
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                                                                                                                                                                                                                         PS01353;
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GEKHDNCTTNSSTSENR-----ASCSFFL----PRITIPDNYTIEVEAENGDGVIKSHM
                                      EPKNVSCETRDFKTLDCSWEPGVDTTLTWRKQRFQNYTLCESFSKRCEVSNYRNSYTWQI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KTVNSSILQYGLESLK - -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IKLGRNDCVISVVAKNHAGSSPPS--RITSVELPS-DNVKTDRAVAMGNGIYISWNSFPN
                                                                                                                                                                                                                                                                                                                    IPR002996; CR1A
                                                                                                                                                                                                                                                                                 IPR003529;
                                                                                                                                                                                                                                                                                                 IPR003961; FN_III.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 (TrEMBLrel. 08,
8 (TrEMBLrel. 08,
9 (TrEMBLrel. 23,
                                                                                                                                                                                    970 AA;
                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     receptor beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -QKNICEGNKSLKTLE--MNPC-TPNTVEVVE
                                                                                                                                                                                                                                                                                                                                                         BAA33725.1;
                                                                                                                                                                                                                                              FN3;
                                                                                                                                                                                                                         HEMATOPO_REC_L_F2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chordata;
Rođentia;
                                                                                                                                                                                      110070 MW;
                                                                                                                              8.8%;
                                                                                                                                                                                                                                                                               Hemtopoptn_L_F2
                                                                                                              131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Created)
                                                                                                                              Score 343; DB 11;
Pred. No. 2.3e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                              Mismatches
                                                                                                                                                                                      E3A07D41754FA847
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gilbert D.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  970
                                                                                                                                                                                                                                                                                                                                                                                          oncostatin
eta subunit.
                                                                         ----QYTV----
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                                                                                                              273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               606
                                                                                                                                                                                      CRC64;
                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jenkins N.A.,
                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                              .
.∍ ∡
                                                                           --KR-
                                                                                                                                                                                                                                                                                                                                                                                                           (OSM) receptor
                                                                                                                                                   970;
                                                                                                              232;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus
                                                                                                            Gaps
                                                                         -TYAF
                                                                         61
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                                      295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   865
                                                                                                              38;
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Qy	112	TYWRLENIAKTEPPKIFRVKPVLGIKRMIOIEWIKPELAPVSSDLKYTLRFRTV 165
Db	349	
QУ	166	NSTSWMEVNFAKNRKDKNOTYNLTGLOPFTEYVIALRCAVKESKF-WSDWSOEKMGMTEE 224
Db	373	IHEHNVSVHMSANYLFSDLDPDTKYKAFVRCASANHFWKWSDWTQKEFS-TPE 424
Qy	225	EAPC-GLELWRVLKPAEADGRRPVRLLWKKARGAPVLEKTLGYNIWYYPESNTNLTETMN 283
Db	425	TAPSQALDVWRQVWSENGRRIVTLFWKPLLKSQANGKIISYNIVVENEAKPTESEH 480
Qy	284	TTNQQLELHLGGESFWVSMISYNSLGKSPVATLRIPAIQEKSFQCIE 330
Db	481	YCVWAPALSTNLSLDLQPYKIRITANNSMGASPESLMVLSNDSGHEVKEKTIKGI- 535
Qy	331	VMQACVAEDQLVVKWQSSALDVNTWMIEWFPDVDSEPTTLSWESVS-QATNWTIQQDKLK 389
дb	536	KDAFNISWEPVSGDTMGYVVDMCAHSQDQRCDLQWKNLGPNTTSTTITSDDFK 588
ОУ	390	PFWCYNISVYP-MLHDKVGEPYSIQAYAKEGVPSEGPETKVENIGVKTVTITWKEIPKSE 448
Db	589	PGVRYNFRIFERSVEHKARLVEKQRGYTQELAPLVNPKVEIPYSTPNSFVLRWPDYDSDF 648
Οy	449	RKGIICNYTIFYQAEGGKGFSKTVNSSILQYGLESLKRKTSYIV 492
ģ	649	OAGFIKGYLVYVKSKEMQCNQPWERTLLPDNSVLCKYDINGSETKTLTVENLQPESLYEF 708
δλ	493	QVMASTSAG-GTNGTSINFKTLSFSVFEIILITSLIGGGLLILIILTVAYGLKKPNK 548
Ъ	709	FVTPYTSAGPGPNETFTKVTTPDARSHMLLQIILPMTLCVLLSIIVCYWKSQW 761
Oy .	549	LTHLCWPTVPNPAESSIATWHGDDFKDKLNLKE
Ъ	762	VKEKCYPDIPNPYKSSILSLIKSKKNPHLIMNVKDCIPDVLEVINKAEGSKTQCVG 817
ОУ	583	DDSVNTEDRILKPCSTPSDK 611
Вb	818	SGKLHIEDVPTKPPIVPTEKDSSGPVPCIFFENFTYDQSAFDSGSHGLIPGPLKDTAHQL 877
γQ	612	FGNVLQEIFTDEARTGQENNLGGEKNGYVTCPFRPDCPLGKSFEELPVS 660
ЪЬ	878	GLLAPPNKFQNVLKNDYMKPLVESPTEETSLIYVSQLASPMCGDKDTLATE 928
Оу	661	PEIPPRKSQYLRSRMPEGTRPEAKE 685
В	929	PPVPVHGSEYKRQMVVPGSLASPSLKE 955
Search con	nple:	Search completed: August 4, 2003, 11:25:15

Search completed: August 4, 2003, 11:25:15 Job time : 117 secs